

# EXPRESSIVE DIALOGUES

between art and architecture

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Dissertation to obtain a master's degree in Architecture with  
Specialization in Interiors and Built Rehabilitation

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# DIÁLOGOS EXPRESSIVOS

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Dissertação para obtenção do grau de Mestre em Arquitectura  
com Especialização em Interiores e Reabilitação do Edificado

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## ABSTRACT

From ancient times to the present day, the evolution of art and architecture always had promising venues of correlation. Beside permanent changes, they aspired to accomplish the same goals and values of creating memorable and unique works of culture. Their compatibility was demonstrated when bonded together in mutually supportive relations.

The following master thesis of theoretical nature seeks to explore synergies between architecture and visual arts, more specifically with the fields of painting and sculpture. This study is a journey through various historical periods of architecture, accentuating the significant change at the transition from 19th to 20th century, through which it was initiated the new and revolutionary artistic expressions in the 20th century, that also imprinted a considerable transformation of architecture. Because today these artistic fields are seen solely in search of new creations, it will be evidenced various possibilities of confluence from recent decades, in such way as to expose the clear presence, importance, and diversity of this union.

A fundamental point in the development of this work is to research the fruitful cooperation of talents, attitudes, and efforts between architects and artists along time. It also draws attention to the compelling alliances and tries to inspire a creation of expressive dialogues on the boundaries of present and future architectural space.

**Keywords:** Art, Architecture, Synergies, Dialogues, Collaborations.

**Título:** Diálogos expressivos  
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## RESUMO

Desde os tempos antigos até ao presente, a evolução da arte e da arquitetura sempre teve caminhos promissores de correlação. Além de mudanças permanentes, elas pretendiam atingir os mesmos objetivos e valores na criação de obras memoráveis e únicas de cultura. A sua compatibilidade foi demonstrada na interrelação de apoio mútuo.

A seguinte tese de mestrado de natureza teórica procura explorar sinergias entre arquitetura e artes visuais, mais especificamente com os campos da pintura e da escultura. Este estudo é uma jornada através de vários períodos históricos da arquitetura, acentuando a mudança significativa na transição do século XIX para o século XX, através da qual foram iniciadas as expressões artísticas revolucionárias no século XX, o que também implicou a transformação considerável da arquitetura. Porque atualmente estes campos artísticos são vistos somente na busca de novas criações, serão evidenciadas várias possibilidades de confluência nas últimas décadas, de modo a expor a clara presença, importância e diversidade dessa união.

Um ponto fundamental no desenvolvimento deste trabalho é pesquisar a cooperação frutuosa de talentos, atitudes e esforços entre arquitetos e artistas, ao longo do tempo. Chama também a atenção para exemplos convincentes de alianças, e tenta inspirar a criação de diálogos expressivos sobre os limites do espaço arquitetônico presente e futuro.

**Palavras-chave:** Arte, Arquitetura, Sinergias, Diálogos, Colaborações.

**Titlu:** Dialoguri expresive

între artă și arhitectură

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## REZUMAT

Din cele mai vechi timpuri până în prezent, evoluția artei și a arhitecturii întotdeauna a avut căi promițătoare de corelație. Pe lângă schimbările permanente, au aspirat să realizeze aceleași scopuri și valori de a crea opere memorabile și unice ale culturii. Compatibilitatea acestora fiind demonstrată în interrelații de susținere reciprocă.

Următoarea teză de masterat de natură teoretică urmărește să exploreze sinergiile dintre arhitectură și arte vizuale, în special cu domeniile picturii și sculpturii. Acest studiu este o călătorie prin diferite perioade istorice de arhitectură, subliniind schimbarea semnificativă de tranziție de la secolul al XIX-lea la secolul al XX-lea, prin care au fost inițiate expresii artistice noi și revoluționare în secolul al XX-lea, care de asemenea au întipărit și o transformare considerabilă a arhitecturii. Deoarece în prezent aceste câmpuri artistice sunt văzute individual în căutarea noilor creații, vor fi evidențiate diferite posibilități de confluență din ultimele decenii, astfel încât să se expună prezența clară, importanța și diversitatea acestei uniuni.

Un punct fundamental în dezvoltarea acestei lucrări este cercetarea cooperării fructuoase a talentelor, atitudinilor și eforturilor între arhitecți și artiști de-a lungul timpului. De asemenea, atrage atenția asupra exemplelor de legături convingătoare și încearcă să inspire crearea de dialoguri expresive asupra limitelor spațiului arhitectural actual și viitor.

**Cuvinte cheie:** Artă, Arhitectură, Sinergii, Dialoguri, Colaborări.



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Obrigado.  
Mulțumesc.





*Architecture is as much a part of the realm of art as it is of technology; the fusion of thinking and feeling.*

Harry Seidler, 1963.

*The reality of architecture is not the built architecture. Beyond these conditional forms – built and not-built – architecture forms its own reality, comparable to the autonomous reality of a painting or a sculpture.*

Herzog & de Meuron, 1988.



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## **1. INTRODUCTION**



## FIELD OF RESEARCH

The architecture and art are two profound engineers of identity and culture that surround us. The purpose of this dissertation of theoretical nature arises from the interest to investigate the collaborative constellation between architecture and arts, namely with painting and sculpture. It also studies the fusions between architects and artists that interchanged their efforts or just mixed masters who vastly combined their artistic talents in single works that resulted in blurred boundaries.

As to start the journey of this subject, it will be made a brief research on the periods before the 20th century, then on the turn of the century, we will immerse in the creative minds of architects and artists that started the way to a significative change through their new visions. A great part of this work will be focused on this change that began a new realm of shared experiences in the 20th century. The art historian Alois Riegl (1858-1905) concocted the theory of *kunstwollen* which represent the variety and the artistic volition (*wollen*) of each epoch that impeded a mechanistic creation in the evolution of architecture and arts. And the central part of this work will be based on the continuing emergence of these new artistic volitions along the 20th century, that become productions reflecting the culture of their own. Namely, this extensive period will be divided into two parts.

The first part of the century in which expressive dialogues between art and architecture are distinctly characterized as a visual contemplation and these are the historical vanguards (Cubism, Futurism, De Stijl, Bauhaus, etc.) And the second part where expressive dialogues are depicted as an experience in real time, which include movements like Minimalism, Expanded Fields with a broad ramification, and Deconstruction.

In the same way, we will emerge in the last decades in which it will be considered new affinities between independent creative fields presenting how they can form a consensus. In International and especially Portuguese panorama, that continued prosperous dialogues between art and architecture, like for usual aesthetic, but also the articulation of the space, for perceptive purposes and other ideas and functionalities. To understand more directly how

emerged collaborations, confluent ideas and inspirations, changes between fields, and other synergies will be presented a summary based on some interviews made to local artists: Fernanda Fragateiro, Pedro Calapez, Pedro Proença and Fernando Salvador Sanchez. They have a rich experience in this subject. Lastly, there is a formulation of final considerations. In annexes, it will be displayed the full interviews with the artists mentioned above, the bibliography and other information.

## RESEARCH QUESTIONS

Along these work, the research also attempted to find answers to the manifold questions about the relations between plastic arts and architecture, such as:

- What does art and architecture have to do with each other?
- How can they work together?
- What kind of relations are possible among them?
- How might they inform or complete each other in a common work?
- How architects integrate art in their projects?
- How artists work with space or create space?
- Are there architects that found inspiration in certain paintings or sculptures or vice versa?
- How successful integrations were and are still produced today?
- How do art and architectural critics and historians understand and present to us the interactions between these fields?
- Are there distinct names for this confluence of art and architecture?
- What synergies existed before, and what is preponderant today?
- Can art and architecture aggregate in the 21<sup>st</sup> century or in the future?



- What kind of ideas differentiates us from the past possibilities?
- In our days is there a desire to combine these fields?
- Are there sufficient books, conferences, exhibitions, that help us to understand this subject?

Still there are other relevant questions that form the body of this work.

Through an extensive theoretical research, examples and arguments will be achieved for the wide understanding of this matter. The background consists of many monographs of diverse languages that totally or partially focuses on the actual theme; but also, exhibitions, conferences and other mediums that intent to bring the art and architecture together.

This work seeks for the continuity of a confluence and synergy of domains that existed in the past, but also are present today in a modest form.



## **2. ART IN ARCHITECTURE**



## PRESENTATION

*Art and architecture express the world, which, without them, is unintelligible.*<sup>1</sup>

The presence of the arts in architecture is not a new theme, having been analyzed throughout historic as well geographical narratives. Even in our memories of places, we notice an extensive relation between them. We see how their union interfered and still interferes in a myriad of possibilities and diverse scales, both in interior or exterior spaces, always resulting in a broad cross-section of remarkable examples. The direct touch of the arts in architecture do not represent just the addition of elements or beautiful images. It reaches the very essence of a good environment, as the foremost tendencies to improve the quality of spaces, thus transforming the ordinary, and therefore stirring our perceptions, curiosity and enthusiasm.

In public buildings, incorporating art into the project as a way to design creative environments or to express symbols can have a very positive impact. For instance, one can recognize it in the mere productivity of employees; also, in hospitals art can have therapeutic value and can destroy the emotion of fear or rejection especially in young patients. In buildings for the performing arts, large auditoriums or churches, art can enhance the “magic” perception of interior activities. In institutional buildings, this dialogue can generate appreciation and understanding of the arts. Two remarkable examples are the *University City of Mexico* (1946-1952) which is aggregated with the consecrated art of Mexican muralism, with works of emeritus artists like Diego Riveira (1886-1957), Juan O’Gorman (1905-1982), David Alfaro Siqueiro (1896-1974) and others. In time the university turned an icon of Mexican architecture of 20<sup>th</sup> century.<sup>2</sup> The next case can be the *University city of Caracas*, Venezuela (1944-1957) by Carlos Raúl Villanueva (1900-1975), an architect for whom art had an essential role in the constitution of architectural space and experience. He collaborated with diverse avant-gardist artists in this project, in the Aula Magna Alexander Calder (1898-1976) created a suspended

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<sup>1</sup> Josep Lluís Mateo, *Expression: Architecture and the arts*. Zurich: Park Books, 2012, p. 5.

<sup>2</sup> Also, in 2007 University city of Mexico was declared a World Heritage Site by Unesco.

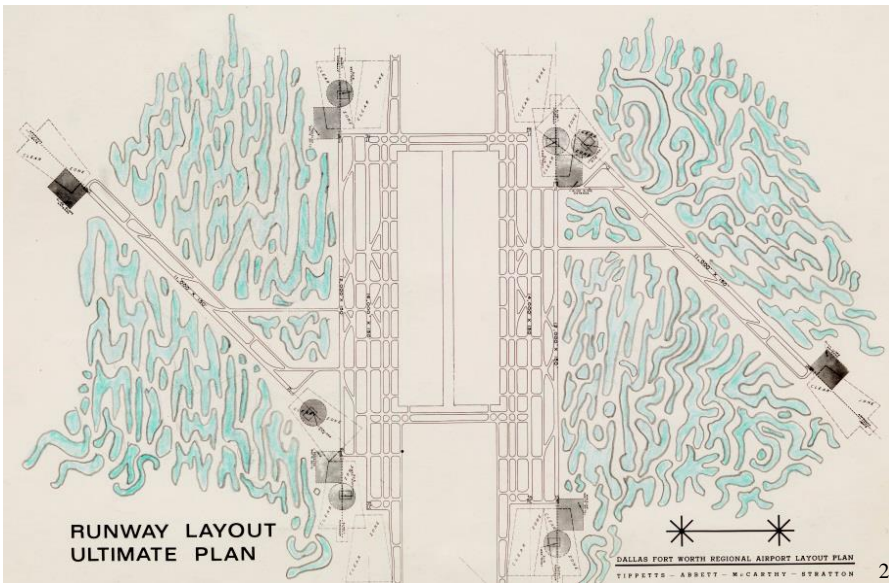


Fig. 1. Acoustic clouds by Alexander Calder, at Aula Magna, University city of Caracas, 1953.  
 Fig. 2. Robert Smithson, Dallas-Fort Worth Regional Airport Layout Plan: 1966, (unbuilt).  
 Fig. 3. a) Permanent art installation by Ayush Kasliwal in New Delhi airport, 2013, b) detail.

and multi-colored cloud-composition (fig. 1). Among the art works were murals by Fernand Léger (1881-1955), Mateo Manaure (b. 1926) and Pascual Navarro (1923-1986), sculptures by Hans Arp (1886-1966) Antoine Pevsner (1884-1962) and others.

Introducing the impulse of art in public spaces, parks or cities squares can turn them into points of attraction and experience for the sake of enjoyment. In these places, art murals, sculptures, monuments or installations invite us to establish a sort of direct dialogue, as we can touch, explore, admire them, making us feeling special and promoting the positive memories of places, these also represent *a constant source of enjoyment for a multitude of people for whom this is often the only exposure to art.*<sup>3</sup> Many of these works resist in time considering to their maintenance and preservation as cultural values, and they compose a heritage for the future generations. The inclusion of art as part of airports circulation space, where visitors get the first impressions of a new city can be a way to present and promote the culture or local traditions. It can also reduce the fatigue resulting of long travels, by diverting attention to art concepts. As (personally experienced) examples I can cite the Chicago O'Hare international airport that has various sculptures, murals. For instance, on the way from one terminal to another, your attention is captured by a kinetic light sculpture of neon tubes entitled "Sky's the Limit" (1987) by Canadian artist Michael Hayden (b. 1943). Flying straightly from Chicago to Dallas you arrive in a new airport and new works of art. In the Dallas-Fort Worth Airport are displayed artworks of more than ten artists like Sol Lewitt (1928-2007) with two paintings "Untitled" in a geometric pattern applied directly on a wall, Dennis Oppenheim (1938- 2011) created an aluminum-frame sculpture "Crystal Mountain" through which passengers can pass, and other works. The idea of art into the DFW Airport started from the beginning of its design; the architectural firm TAMS worked in collaboration with the post-minimalist artist Robert Smithson (1938-1973) that was as an artistic consultant and helped in concept, for instance, the repeating identical modular terminals *paralleled the seriality and site specificity of contemporary sculpture.*<sup>4</sup> Between 1966-1967 Smithson projected several artistic interventions for the

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<sup>3</sup> Louis G. Redstone, *Art in Architecture*. New York: McGraw-Hill Book Company, 1968, p. ix.

<sup>4</sup> Janna Eggebeen, *Between Two Worlds: Robert Smithson and Aerial Art*, in *Public Art Dialogue*, vol. 1, n°1, London: Routledge (March 2011), p. 87.

airport one of them was “Wandering Earth Mounds and Gravel Paths” a large-scale composition of low biomorphic forms of earth and rocks trails surrounded the airport runways. That was intended to be viewed from above flying aircrafts; he also suggested to introduce into the project finished works by Sol Lewitt and others. Though his artistic contributions never came to fruition, these ideas were a forerunner for his famous works that consecrated him like an artist of Land Art.

Another example, in the Indira Gandhi airport in New Delhi, it is instantly felt the impact of another culture, when within the architectural framework there are scattered examples of different domains of arts. Moreover, even if these constitute just transit places, or “non-places,” as the French anthropologist Marc Augé (b. 1935) defined them, art can help to create a different atmosphere and make these places memorable.

And through the practical and theoretical applications of existing knowledge, there are almost limitless rules, configurations, and interpretation representing the other artistic disciplines in architecture. The pictorial or sculptural approaches can occur as integrated elements or *independent but complementary, giving richness of color and form in the near view*.<sup>5</sup> As bas-reliefs on surfaces, painting or tile panel blended into a wall, sculptures that also can be used within the architectural epidermis, or pertain to the interior or exterior spaces.

As we can establish, through artistic thinking, in architecture emerged a *spatial-plastic unity*. This kind of joint approach that it is not divisible: we can see it in specific examples, when architecture itself turned into a sculptural vocabulary, through the value of mass; or employ this idea just in interior space that works “like a habitable sculpture”; or even concomitantly in the inner and outer appearance of architecture. The roles of art and architecture can also revert. Although sculpture can be inspired by architecture, this exchange started to be more enhanced in the geometric works of minimalist sculptors, whose most of the works express a direct dialogue with space. Furthermore, different appearances (such as screen-printed or stained glass, various

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<sup>5</sup> Henry-Russell Hitchcock, *The place of painting and sculpture in relation to modern architecture*. 1943, apud Christopher Pearson, *Designing UNESCO: art, architecture and international politics at mid-century*. London; New York: Routledge, 2010, p. 72.



opacities, transparencies, contrast combinations of elements, details, materials, artistically perforated materials, lighting, and many other creative matters) represent distinct manners that are meant not to be just as aesthetic. This term, originally derived from Greek, signifies perceptive or experience through our senses, but also as functional, efficient and flexible systems necessary for our living in the built environment. With these processes, new perspectives are open, architecture can achieve a higher level, architects can raise their significance and uniqueness in everyday reality, and can touch people's feelings.

The American architect Christian Bjone working on the exploration of collaborations, did specify three types of possible interaction. The first one is the collaboration between architect and artist; the second is architect's choice of artists or even his creations for his own; and lastly one curator or owner's choice of permanent artworks, in this latter case, especially for museums.<sup>6</sup>

Also, the Spanish architect Josep Lluís Sert (1902-1983) that dedicated his life to the exploration about the confluence between the arts and architecture, in 1951 established three types of interaction: integral, applied and related. The first one occurs when the architect acts as a sculptor or a painter and in his process of working combines all fields in a single one inseparable, as in the work of Gian Lorenzo Bernini (1598-1680) *that was the first who has tried to combine the architecture with sculpture and painting in this way, that all of them made a beautiful compound*<sup>7</sup>, as wrote his biographer Filippo Baldinucci (1624-1697) in 1682. We may also consider Francesco Borromini (1599-1667), Antoni Gaudí (1852-1926), Frank Gehry (b. 1929) and many others; the second possibility, the most common as Sert specified, is the collaboration in close sympathy with painters and sculptors, and the last one, merely the fields related to each other, that will make architecture a richer production. Also, already more than sixty years ago, Sert drew attention to the fact that we cannot think only looking at bronze statues or static and eternally painted murals, we can utilize color, light, and movement as different ways of expression.<sup>8</sup> So

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<sup>6</sup> Christian Bjone, *Art and Architecture, Strategies in Collaboration*. Basel: Birkhäuser, 2009, p. 177.

<sup>7</sup> Filippo Baldinucci, Francesco Saverio Baldinucci, Sergio Samek Ludovici, *Vita del Cavaliere Gio. Lorenzo Bernini*. Milano: Edizioni del Milano, 1948, p. 140.

<sup>8</sup> Patricia Juncosa (ed), *Josep Lluís Sert: Conversaciones y escritos. Lugares de encuentro para las artes*. Barcelona: Editorial Gustavo Gili, 2011, p. 35-39.

through contemporary issues such as new construction possibilities, new technologies applied to materials, the new digital realm that can define space and others options have brought about the various fusions and experimentation between arts and architecture, continuing to confer a vibrant character for the shaping of our built environment.

The American architect Philip Johnson (1906-2005) also shared some of these ideas and explained two similar possibilities of unifying modern art and architecture, these were the adjunctive (like an added element) and integrative (as a whole) alternatives.

*Artist and architect speak the same language ....*<sup>9</sup>

In such a way as to achieve the same goals, in expressing beauty, emotions, sensations, in dealing with shapes, compositions, colors, light, it makes complete sense the cooperation between architects and artists; from this productive meeting, exchange of practice, ideas, and knowledge can result in a remarkable final product. Also, architects can get inspired by a work of art, bringing their ideas such to outdoor or indoor environments, or in the aesthetics of their own creation. Very often architects have an artistic background that also helps and influences their creative process; these artistic aspects can be reverted into architecture like dominants of visual and sensorial experiences.

Therefore, artists can appeal to architecture to conceive their works, starting with the 1950s and 1960s artists sought to find new affinities and to escape from the museums, in order to reach a more extensive contact with people, and their new range of innovative experimentations, connected to arts and architecture, in a new route.

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<sup>9</sup> Victor Pasmore, apud Giuliana Bruno, *Public intimacy: architecture and the visual arts*. London: The MIT Press, 2007 p.43.

## HISTORICAL CONTEXTUALIZATION

*“It is not possible to understand the evolution of architecture and (...) urbanism, without taking account their continuous relations with art.”<sup>10</sup>*

Since the very early times of civilization, art was an artistically means to express human's emotions, thoughts, beliefs, and aspirations, being the reflection of the philosophies and the existence of an epoch, and architecture, the art of space provided the needed shelter and protection. The historical precedent between the arts and architecture has been a symphonic one, recording roots since the dawn of time, always next to each other. From the ancient Paleolithic, we can observe their interconnection, where man expressed his life and activities in the interiors of caves through inscriptions, incised drawings, paintings, and engravings. These compositions executed on the rough rock surfaces, conforming spatial limits, left behind impressive places such as the Altamira cave in Spain or Lascaux in France. The massive changes brought by Neolithic culture and a more static domestic existence created a demand for elegant decoration and ornament; various forms and techniques were developed, from then on, to complete the architectural surfaces of that period.



Fig. 4. The great hall of bulls, Paleolithic mural painting in Lascaux cave, southwestern France.

Formerly architecture, sculpture, and painting belonged together; even more, the architectural historian Leonardo Benevolo (1923-2017) affirmed that

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<sup>10</sup> Josep Maria Montaner, *A Modernidade Superada, Arquitectura, Arte e Pensamento do Século XX*. Barcelona: Editorial Gustavo Gili, 2001, p. 149.

these disciplines were considered parallel activities designated by the common name of “arts” or “fine arts.”<sup>11</sup> These arts were developed synchronized and based on similar artistic concepts with architecture being the physical framework where was executed the sculpture and painting, being this process known as “*integration*.”<sup>12</sup> Even in educational institutions the fields were fused, in architectural studies were included programs in sculpture and painting, and just in the 18<sup>th</sup> century architecture gained an entirely independent study program.<sup>13</sup>

In ancient Mesopotamia, Egypt, Greek and Roman periods there were mostly highlighted in palaces or temples, places of worship. The ancients instituted the manner of painted and sculptured decorations that enhanced according to their tradition the visual aspects of architecture. Hanging tapestries were significantly visible edges of interiors, and then it became a tendency the use of stucco, metal paneling, alabaster wall panels, glazed tiles, mosaics from uncut irregular stones, afterwards from colored, cut stones or other hard materials, formed in pictorial compositions named mosaic composed of *tesserae*.<sup>14</sup> Especially murals that later were designated as frescoes achieved their flourishing around the 11th century. Façades with bas-reliefs or sculptures, decorated floors, ceilings, reflecting aspects of their lives, scenes of everyday life, environment, historical or mythical scenes in a broad chromatic palette with a combination of white, black or even gold. The German architect Gottfried Semper (1803-1879) writing on ancient architecture especially about Assyrian, Egyptian, and Greek, attributed the term “*dressing*” (*Bekleidung*) for all these pictorial or sculptural motifs that were submitted to architectural imperatives.

*Born of the most fundamental physiological and emotional needs, art and architecture, “from space to the object, and from the object to the horizon of all things,” are, like mind and body, inseparable.*<sup>15</sup>

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<sup>11</sup> Leandro Benevolo, *A cidade e o arquitecto*. Lisboa: Edições70, 1998, p.93

<sup>12</sup> Juan Carlos Rico, *Museos Arquitectura, Arte: los espacios expositivos*. Madrid: Silex, 1999, p. 23.

<sup>13</sup> Mark Wigley, *The Architecture of Invisible Lines*, in Rosado António de Campos, Benitez Elba, [et. al.]. *Co-Laborações: Arquitectos, Artistas*. Lisboa, Parque Expo’98, 2000, p. 152.

<sup>14</sup> Maria Alexandra Salgado Ai Quintas, *Transfigurações do espaço arquitectónico através da pintura na arquitectura portuguesa entre os anos sessenta e noventa do século XX*. Lisboa, FA, 2009. Ph.D. Thesis, p. 56.

<sup>15</sup> Philip Jodidio, *Architecture: Art*. Munich: Prestel, 2005, p.9.

The examples of a genuine relationship between art and architecture also consist in the use of sculptural elements. Patterns, nature, animal or human forms that were assembled into architecture, often in repetitive or continuous sequences, allowed to see them not as individual elements but as an integral part of a building. Such as the *Greek Caryatides* in the south façade of the *Erechtheion* on the Acropolis of Athens, where six sculptural female figures are serving as a support to the architectural structure like columns. *Caryatides* are not representative elements just in Greek architecture, for they were widely spread in other cultures, like in the ancient Egypt, the case of Osiris or Hathor pilasters. Also, these figures were used extensively in the classical style, and we can appreciate some of these examples in the museum of Louvre's room of the *Caryatides* (1550) by Jean Goujon. In more recently architecture also various architects involved this concept in their works. Manuel Nunez Yanowsky (b. 1924) for the project of two mirroring apartment blocks in Paris (1995-1997) he used Venuses that are carrying the buildings on their shoulders and mark the corners; furthermore, there are three bronze *Caryatides* designed by the Polish sculptor Jerzy Juczkowicz (b. 1954) for the building of Supreme Court of Warsaw (1999). The Elgin Marbles with the Parthenon represent another example of ancient harmonious coexistence of sculptured work with architecture, despite today's physical separation it remains as an example of the blending of the arts. Later, John Ruskin (1819-1900) will remark about the Greek system *in which the human sculpture is perfect, the architecture and animal sculpture is subordinate to it, and the architectural ornament severely subordinated to it, again*.<sup>16</sup> However, we cannot also ignore the Egyptian temples with integrated sculpture, like at the main entrance to temple of Nefertiti, that of Ramses II or the Sphinx in front of the ancient pyramids.

Constant representations were in a continuing expansion; arts surrounded or even subordinated to the architectural system, in different possibilities along centuries. Medieval Age was the dominant period of style, when art was inseparable from religion, and from the spaces of churches, monasteries or palaces were the support for the expression of arts. Such elements persisted like murals in interiors, as well in exteriors, architectural sculptures in façades or at the main portal.

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<sup>16</sup> John Ruskin, *The Stones of Venice*. London: J.M. Dent & Sons, 1921, p. 213.

Frequently in pavements were used mosaics with geometric patterns and from the Gothic on the use of stained glass was a very common detail. All these elements depicted symbolical scenes detached from their beliefs and amplified the beauty of the interiors.

In this same period, we can consider Islamic architecture that expanded from Spain to western China with a similar vocabulary of images in the pictorial or sculptural treatment of architectural surfaces. The Alhambra, in Granada, which had its foundation ordered in 1238 by Muhammad I, represented a sum of sumptuous constructions. Façades and interiors were filled with polychrome carved or painted ornamentation, each with a distinctive ornamental grammar representing epigraphs, plant-life details, geometric and symmetric patterns of symbolic character, stalactite vaulting. After the Catholic Monarchs conquest of the territory in 1492, the Alhambra was conserved and later on was carried out an extension of it. In an adaption to the different times, some interiors like the queen's dressing room were painted in a Renaissance style, inspired by mythological scenes, allegorical animals or plants. In 1527 started the construction of Charles V Palace, a Renaissance building with a decorative program of the treatment of façades by the architect Pedro Machuca (1490-1550) that had been trained in Rome with artists such as Michelangelo. The same kind of alliance of architecture with artistic elements predominates in Taj Mahal in Agra, which exterior is decorated with different varieties of colored semi-precious or precious stones inlaid into the white marble surfaces, and the work of many artists is intended to be perceived as a harmonious whole.

The convergence between art and architecture started to be more accentuated with the 14th century in Renaissance, as kind of rebirth of culture of ancient Greece and Rome. First was developed by Filippo Brunelleschi (1377-1446) in Florence with Santa Maria del Fiore, and then quickly spread to other cities. In Italy, this tradition of synthesis of the arts also will continue in the 20th century, for instance under the fascist regime of Mussolini. In Renaissance architects sought new decorative motifs based on order, harmony and geometric balance. Linear perspective that became the expression of that whole era was first used and developed by Brunelleschi and by Leon Battista Alberti (1404-1472). First Brunelleschi experiment was the peepshow, and

Alberti contributed with *camera obscura* and the *Albertian grid*. This new possibility allowed further the creation of compositions with correct perspective and most of them were in touch with architectural limits.

This sort of representation initiated a significant break with the previous medieval ideas. Therefore, in this new conception of space are remarkable paintings that have become part of the walls or ceilings. Through their representations with figures, ornaments, or scenery composed of imitations, depth and realistic illusion of three-dimensional space on a two-dimensional surface created by the use of perspective changed the notion of space. Two examples are Michelangelo's (1475-1564) ceiling painting of Sistine Chapel or Masaccio's fresco "The Holy Trinity" in Santa Maria Novella church at Florence. In this sense Sigfried Giedion (1888-1968) also accentuated that through the discovery of perspective the new conception of space was translated into artistic terms.<sup>17</sup>

In the Italian Renaissance, many artists had general knowledge of the three specialties and worked in all these fields, in every period we can find masters that studied and epitomized their multidisciplinary capacities. For instance, the multifaceted Michelangelo besides his work in the Sistine Chapel and other paintings into architecture, or as a sculptor of the tomb of Pope Julius, designed the Campidoglio square and its palaces, or St. Peter's Basilica both in Rome (fig. 5, fig. 6, fig. 7). Bernini described him as "*great both as a sculptor and painter: but divine as an architect*."<sup>18</sup>

The Italian painter Baldassare Peruzzi (1481-1537) designed Villa Farnesina, or Raphael Sanzio (1483-1520) created and painted the Chigi Chapel in the 16th century. Giedion also observed that in Renaissance from the painter, sculptor or architect, as the relative less time for realization of a painting than a sculpture or a building, the painter was the first one to attain the new vision of his time, and in this way, he stated that the same thing happens in the modern period, where painting anticipated architecture.<sup>19</sup>

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<sup>17</sup> Sigfried Giedion, *Space, Time and Architecture: The Growth of a new tradition*. Cambridge: Harvard University Press, 1970, p. 30-31

<sup>18</sup> Sigfried Giedion, *op.cit.*, p. 65

<sup>19</sup> Here he specifically wrote about Masaccio as the painter, Donatello the sculptor and the architect was Brunelleschi. *Ibid.*, p. 32-33.



Fig. 5. Michelangelo, Sistine Chapel in the Apostolic Palace, Vatican, 1508-1512.  
 Fig. 6. Michelangelo, Tomb of Pope Julius II, in St Peter in Chains, Rome, 1545.  
 Fig. 7. Michelangelo on of the architects of St. Peter Basilica, Vatican, 1547.



The above referred painterly issues can be observed in continuity in Baroque spatial compositions of the 16th century in Rome. These examples established the synthesis that united architecture with painting and sculpture, *merging into each other for the sake of ornamentation and prestige*.<sup>20</sup> To meet this union, performances and music also had a significant role because they were meant to complete the ceremonious and dramatic scenario of the space. In the interiors, the decorative surplus of equilibrated elements twisted and overlap walls and ceilings, in vibrant, illusionist and rich compositions, based on symmetry, so that vertical and horizontal planes themselves seem to disappear, being also characterized by an intense contrast of light and shade. These principles where the arts joined together, in an abundant dialogue, were manifested in great sets of churches, palaces or villas. Late Baroque of the 18th century was followed by the light and airy Rococo, a spatial art with accentuated volume, exotic and naturalistic motifs in ubiquitous asymmetrical forms and lines, with a palette of pastel colors in combination with gold.

At the finish of 19th century, the dominant phenomenon Art Nouveau (1890-1910) also known as “Stile Liberty” in Italy, or “Jugendstil” and “Secession” in Germanic lands, has started a change of representation of arts in architecture. Launched in Belgium, was later internationally extended to Northern Europe and the United States. This style, which in fact represented different formal manifestations, has been inspired by earlier English Arts and Crafts movement of the 19th century that was led by William Morris (1834-1896) and with some influences of Oriental art. It was the first attempt to replace the classical, decorative architecture that predominated since the 17th century and had been taught in the Beaux-Arts academies. A vast number of architects had studied in these circles. Besides the ideals that were studied there, they will start a change at the cross of centuries that will search the definition of the new time. The new style abandoned the post-Renaissance idea of realism, but revealed in some way a persistence of playfulness, lightness and airiness elements surviving from Rococo and influence of Japanese print, in an abstract interpretation treated with a demand for integrity between architecture, decorative arts, interior design, furniture and diverse objects.

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<sup>20</sup> Jean Starobinski, *L'Invention de la liberté*, 1964, apud, Kenneth Frampton, *Modern architecture, a critical history*. 3rd ed., London: Thames & Hudson, 1980, p. 12.



Fig. 8. The Beethoven Frieze (detail) Gustav Klimt, 1902.

Fig. 9. Interior with the Frieze by Klimt at 14<sup>th</sup> exhibition of Secessionist building, Vienna, 1902.

Fig. 10. Adolf Böhm, frieze, Dawning Day, at 14<sup>th</sup> exhibition of Secessionist building 1902.

Fig. 11. Mosaics by Gustav Klimt, Palais Stoclet in Brussels, 1904-1911.

In this stylistic trend of new space abstraction, delicate ornaments distributed throughout the entire space were more than just a system of decoration, they worked as a *concept of molding space into a unified whole*.<sup>21</sup> Iron elements had a considerable presence in the whole image of the architecture of that period, that was characterized by asymmetrically balance and perfect irregularity predominated by a plasticity of swirling lines, forms and natural motifs present in façades, interiors, furniture also urbanism. Architects like Victor Horta (1861-1947), Antoni Gaudí, Hector Guimard (1867-1942), Frantz Jourdain (1847-1935), and others did contribute to the expansion of this movement.

A notable example where the forces of architecture, sculpture, painting, and music were congregated to make a total work of art is in the building of the fourteenth Secessionist exhibition of 1902 in Vienna, dedicated to composer Ludwig van Beethoven (1770-1827). The Austrian architect Josef Hoffmann (1870-1956) like other Secessionist architects were designed it creating a harmonious, balanced composition with abstract reliefs. The building included paintings and mosaics of many artists under the guidance of Hoffman; for instance, Gustav Klimt (1862-1918) the founder of Secession group in Austria contributed to three of the walls with a frieze (fig. 8, fig. 9) of his own symbolist style that was a visual interpretation of the Beethoven's 9th symphony of 1824 other paintings on entire walls were by Adolf Böhm (1861-1927), Alfred Roller (1864-1935), and Ferdinand Andri (1871-1956). All these works were placed around a central sculpture representing Beethoven by Max Klinger (1857-1920). At the opening of the exhibition and in the background music by Beethoven was being played. Hoffmann commissioned Klimt again for his project for the Palais Stoclet (1904-1911), a building in Brussels that became a masterpiece of Art Nouveau in which Klimt designed abstract mosaics made of diverse materials for the dining room (fig. 11). In the next step of the evolution of architecture, these lavish imitations and illusionary perception of space will be prevented, as just some of Art Nouveau concepts will be incorporated into the following avant-garde movements. So that Secessionist architect Otto Wagner (1841-1918) in a work written for his students "Modern architecture" (1902) assessed that:

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<sup>21</sup> Joseph Nechvatal, *Immersion into Noise*. Ann Arbor: Open Humanities Press, 2011, p. 133.

*Each new style gradually emerged from the earlier one when new methods of construction, new materials, new human tasks and viewpoints demanded a change or reconstitution of existing forms.*<sup>22</sup>

Much later, around the decade of 1980, Philip Johnson also accentuated that the ideas of one style are nourished from preceding ones, stating:

*(...) Since no forms come out of nowhere, but are inevitably related to previous forms.*<sup>23</sup>

With a foregoing basis of previous styles, on the crossroad of the 19th to the 20th century, on a world scale, art and architecture was on the verge of a radical change and started to give free rein to distinct visions and to elaborate novel methods that accomplished new aesthetic values and needs. Therefore, emerged new trends, where most of them with the same thoughts and expressions, both in the artistic and the architectural realm, defined an original period known as the vanguards.

*(...) and yet years and continents apart, art and architecture fuse around the same essential forms. The fact that different religions and civilizations produce such similarities of symbolism and form is more than coincidence; it is a proof of how deeply rooted the ties are between various forms of artistic expression and architecture.*<sup>24</sup>

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<sup>22</sup> Otto Wagner, *Modern Architecture: A guidebook for his students to this field of art.* trans. Francis Mallgrave, 3rd ed. Santa Monica: The University of Chicago Press, 1988, p. 74.

<sup>23</sup> Philip Johnson, Mark Wigley, *Deconstructivist Architecture.* New York: Museum of Modern art, 1988, p. 7.

<sup>24</sup> Philip Jodidio, *op.cit.*, p.10.

### 3. SHARED EXPERIENCES OF 20<sup>TH</sup> CENTURY

*A flight from reality (...) to create a 'new reality'.<sup>25</sup>*

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<sup>25</sup> Herbert Read, *The philosophy of modern art*. New York: Meridian Books, 1957, p. 28.



## **FIRST PART OF THE CENTURY**

*Expressive dialogues as a visual contemplation.*





## DISCREPANT IDEAS OF THE PAST

*“Things have disappeared like smoke; to gain the new artistic culture.”*<sup>26</sup>

Following the occurring events, in the 20th century, a new phase arose in the cycles of architectural history, where the past and future intersected in what is known, getting lost in the unknown. The mutual aspiration of new conceptual and critical spirit was against the false normativity in history, like the opulence of the former plastic space, ornamentations, and imitation of natural appearance in interior and exterior limits. And based on a different, revolutionary thinking and visual cleansing was created a new cultural value representative of its time.

Earlier preoccupied with this subject, architectural theorist Marc-Antoine Laugier (1713-1769) was for a simple architecture composed of essential elements. In his book *“Essay on architecture”*, published in 1753, he reflected a critical attitude of heavy Gothic or Rococo practice and proposed to return to a simplified architecture and demanded the elimination of various untruthful elements of a building. According to him, classical orders were a fortunate discovery *satisfying all needs and tastes*.<sup>27</sup>

The English art critic John Ruskin in second chapter *“The Lamp of Truth”* of his book *“The Seven Lamps of Architecture”* (1849) called for the deliberation of external representation to achieve clarity, also to refrain the use of machine-made ornaments and the paintings of surfaces to represent another material, like marbling of wood or painting sculptured ornaments; also lies of construction as in the triumphal expression of Gothic architecture, when a structure or an extension is just for decorative purpose and don't exert its function, for him the Middle Ages were superior to Renaissance. However, the Gothic also had a positive influence he accentuated, as the beautiful stonework of cathedrals because through them spirituality was expressed. Further in this path for change, Gothic served as an inspiration for cubist architecture. In *“The Stone of Venice”* (1853), a history of Venetian architecture, he presented

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<sup>26</sup> Kazimir Malevich, apud Troels Anderson, *K.S. Malevich: Essay on Art 1915-1933*, vol. 1, Copenhagen, 1969, in Charles Tharrisson; Paul Wood (ed), *Art in Theory 1900-1990, An anthology of changing ideas*. Oxford: Blackwell, 1992, p. 166.

<sup>27</sup> Marc-Antoine Laugier, *An Essay on Architecture*. Los Angeles: Hennessey & Ingalls, 1977. p. 41.

various subjects about ornament appearance both in interior and exterior, arguing by instances its worst and best uses. For a good result, he evidenced to use a quantity of ornament as less as possible and to remember its *essence (...) that consist in its being governed*.<sup>28</sup>

August Endell (1871-1925) designer and self-taught architect in Germany was among the protagonists of these ideas, around 1890 he envisioned the new art as *an art which stirs the human soul through forms which resemble nothing known, which represent nothing, and which symbolize nothing; an art which works solely through freely invented forms, like music through freely invented notes*.<sup>29</sup> In his writings of 1898, he pointed that: *the architect must be a form-artist; only the art of pure form leads the way to new architecture*,<sup>30</sup> exemplifying with possibilities of combining forms, horizontal, vertical planes or lines with length, width, height also colors and proportions. These fundamental ideas later will predominate even in De Stijl movement of the decade of the 1920's.

Louis Sullivan (1856-1924) was an American architect and writer that founded the so-called Chicago School, and created steel-frame skyscrapers buildings with delicate ornaments from natural motifs to geometric combinations harmoniously conceived into the structure. Later in his essay entitled "*Ornament in Architecture*" (1892) he explored the purpose of ornament and advised its best association into the new individuality of modern buildings. He recommended the temporary abandonment of ornament that was not a necessity, in such a way as to design with the simplicity of mind and better manipulate unadorned forms; his view that a building should be "*well formed and comely in the nude*"<sup>31</sup> became a foundational statement in that epoch.

*"I take it as a self-evident that a building, quite devoid of ornament, may convey a noble and dignified sentiment by virtue of mass and proportion."*<sup>32</sup>

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<sup>28</sup> John Ruskin, *op.cit.*, p. 230.

<sup>29</sup> George Rickey, *Constructivism: Origins and Evolution*. London: Studio Vista, 1968, p. 9.

<sup>30</sup> Harry Francis Mallgrave *op.cit.*, p. 211.

<sup>31</sup> Louis Sullivan, *Ornament in Architecture (1892)*, in Harry Francis Mallgrave, Christina Contandriopoulos, *Architectural Theory, volume II: An Anthology from 1871 to 2005*. Oxford: Blackwell Publishing, 2008, p. 58.

<sup>32</sup> Idem.

But in the case of engaging it, instead of considering it as an addition, to use an ornamental design that will seem a part of the surface or substance that receives it, he did call this process “*an organic system of ornamentation.*”<sup>33</sup> Some of the examples that followed these ideas and helped to create his architectural character can be seen in *The Wainwright building* (1891) in St. Louis (fig. 12, fig. 13) or *The Guaranty skyscraper* (1896) in Buffalo, New York. Both buildings, with unobtrusive ornaments in terracotta blocks in the same nuance as the entire façade, were perceived as pertaining to the whole component of the structure.

Around 1894, Otto Wagner decided to leave and transform the past historical stylistic trends, to define a new representative style with new ornamental vocabulary suited to its time and requirements. The consisting factors in the creation of his architecture were based on the tectonic realism and rationalism of the time, believing that would not affect art, on the contrary would make a real improvement and *in this way a number of new artistic motifs will emerge.*<sup>34</sup> Even more he appointed that “*a fully developed architect has become a mere experimenter with art — a sensation-monger, a train-bearer of fashion.*”<sup>35</sup> In his book “*The Art of Building of Our Time*” (1895) he pointed out simplicity of conception and construction, where the artistic truth would imply a correspondence between the new materials in their pure state and construction. As in the case of the *Postal Savings Bank* (1904-1906), (fig. 14) in Vienna, where we found a clear building with a simple façade in basic slabs of white marble inlaid with aluminum bolts, and the interior also expressed an impressive purity and simple materials. In the monograph “*Sketches, Projects and Executed Buildings*” (1889), he proclaimed himself a practitioner of a “certain free Renaissance,” and this also was his teaching purpose at Vienna Academy of Fine Arts.

Wagner and Sullivan were praised by Austrian architect, designer and theorist Adolf Loos (1870-1933), that expressed the same admiration for undecorated surfaces and the simplification of form. In his essay “*The luxury Vehicle*” (1898) Loos pointed: “*To find beauty in form instead of making it*

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<sup>33</sup> Louis Sullivan, *op.cit.*, p. 189.

<sup>34</sup> Harry Francis Mallgrave, *Modern Architectural Theory: A Historical Survey, 1673-1968*. New York: Cambridge University Press, 2007, p. 206

<sup>35</sup> Sigfried Giedion, *op.cit.*, p. 317.

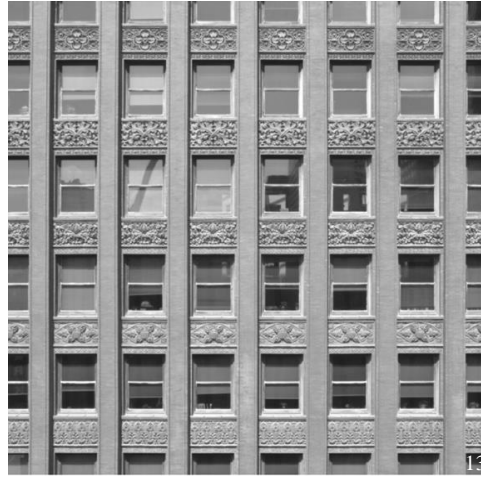


Fig. 12. The Wainwright building in St. Louise, by Louis Sullivan  
 Fig. 13. The Wainwright building, ornament detail.  
 Fig. 14. The Postal Savings Bank, in Vienna by Otto Wagner.  
 Fig. 15. The Goldman and Salatsch building in Vienna by Adolf Loos.  
 Fig. 16. Interior of villa Müller, by Adolf Loos, Prague, 1930.

*dependent on ornament is the global towards which humanity is aspiring.*"<sup>36</sup>

Much of his texts reflect his travelling to United States (1893-1896), for instance he was influenced by earlier Sullivan's article about the ornament. In 1908 he published his widely known pronouncement "*Ornament and Crime*" where he claimed the excess of decoration and equated it with primitivism or decadence, affirming that is wasteful, futile and no longer organically related nor the expression of his time's culture. He referred not just to architecture but also to objects of daily use like clothes, footwear, furniture, or crockery; he believed that the absence of ornament and false aesthetics represented a sign of intellectual power. In this sense, his architectural style involved a reduced classicism, as an evidence of this ideological intent, can be his signature building in Vienna *The Goldman and Salatsch* (fig. 15) also known as *Looshaus* (1909-1911) that invoked clarity by a simple combination of marble columns at the base and transparent planes above. Yet its incomprehensible simplicity created a scandal with authorities in 1910 that was solved with a compromise. In his *Steiner House* (1910) or *Villa Müller* (1930) he used plain surfaces and blank windows. His writings about the elimination of ornament and applied arts developed a new principle in architecture and influenced Modern Movement architects. One of them is Le Corbusier (1887-1965) that abandoned the Arts and Crafts directives to introduce the concept of a free plan in *Maison Domino* (1914) that became his design approach mainly for domestic architecture and a fundamental foundation of his "*Five Points for a New Architecture*." In 1930, Le Corbusier mentioned:

*"Loos swept at our feet, it was a Homeric cleaning: accurate, philosophical and logical. With this Loos informed our architectural destiny."*<sup>37</sup>

The modern Dutch architect Hendrik Petrus Berlage (1856-1934) designated the 19<sup>th</sup> century architecture as a "*sham architecture*."<sup>38</sup> Just like Otto Wagner, he supported a free Renaissance position, and by 1890s he started to develop his own style that tended toward an austere simplification. In the article "*Architecture and Impressionism*" (1894) he convoked "*a*

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<sup>36</sup> Adolf Loos, *Spoken into the Void: Collected Essays 1897-1900*. Cambridge: MIT Press, 1987, p. 36.

<sup>37</sup> Le Corbusier, apud Ricardo Estarrio, *Adolf Loos e a arquitetura anti-ornamental*, in Manuel Tainha, *Binário: Arquitetura, Construção, Equipamento*, nº62, (novembro 1963), p. 624.

<sup>38</sup> Nikolaus Pevsner, *Pioneers of Modern Design*. London: Penguin Books, 1991, p.30.

*simpler architectural concept*,<sup>39</sup> where he referred to impressionist paintings as the lessons that might be transported to architecture. In his essay of 1908 “*Foundations and development of architecture*,” he more amply exposed his principles for the new architecture, being its fundamentals geometry, balance, simple forms, proportional systems in design and the exclusion of any ornament characterized from previous styles, the use of bare walls, stating that:

*In architecture, decoration and ornament are quite inessential while space-creation and the relationships of masses are its true essential.*<sup>40</sup>

Beside this, Berlage also believed that *architecture should absorb painting and sculpture into a kind of Gesamtkunstwerk*,<sup>41</sup> and both his writings and architecture were a considerable influence on the early development of 20th century De Stijl, where can be detected simplification, abstraction and at the same time great achievements in what concerned the total work of art. Initially, Frank Lloyd Wright (1867-1959) started to work at Sullivan’s office in the city of Chicago, and in 1893 he established his practice in Oak Park, a village close to Chicago. Like most of his colleagues, he also was centered on change and admired the proficiency of free spatial flows and simplicity because “*space is more spacious, and the sense of it may enter into every building, great or small.*”<sup>42</sup> In his writings, such as “*In the Cause of Architecture*” (1908-1914), “*The Japanese Print: An Interpretation*” (1912) “*An Autobiography*” (1938) or “*The Natural House*” (1954) he required to reach expressivity by simple and fewer lines, right forms, rhythmic play, poise and balance, elimination of insignificant, fewer details and labor, simple materials and natural colors, and all these qualities together will constitute *really the very life of all art*.<sup>43</sup>

Hermann Muthesius (1861-1927), a German architect and theorist, that studied art history, philosophy, and architecture, saw the aesthetic progress in simplified forms and the elimination of false representations of artistic intentions. In his essay “*New ornament and new art*” (1901), he headed to a healthier living habitat fulfilled by light, air, and comfort with simple furniture.

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<sup>39</sup> Harry Francis Mallgrave, *op.cit.*, p. 219.

<sup>40</sup> William Curtis, *Modern architecture, since 1900*. 3<sup>rd</sup> ed., London: Phaidon Press, 1996, p. 153.

<sup>41</sup> Paul Overy, *De Stijl*. London, Studio Vista, 1969, p.48

<sup>42</sup> Nikolaus Pevsner, *op.cit.*, p. 31.

<sup>43</sup> Frank Lloyd Wright, *The Japanese Print: An Interpretation*. Chicago: The Ralph Fletcher Seymour, 1912, p. 21.

The Belgian painter Henry van de Velde, (1863-1957) switched his activity to architecture around 1890 because of the revolt of falsification that wasn't appreciated. Becoming an architect for him the new period also corresponded to a new ornament, separated from the overloaded ornamentation of the past. His new concepts were composed by regular and balanced lines and forms assembled in harmonic compositions. He explained this theory in his essay "*The new ornament*" (1901) and can be seen tested in Bloemenwerf, his residence house of a pronounced simplicity completed in 1896. The Dutch architect, Jan Duiker (1890-1935) aspiring for healthy environments created out of new materials clear and light infilled structures, with the elimination of decorative elements, and formulated this process as "*spiritual economy*" being a basis for the design process, *which as he wrote in 1932 "leads to the ultimate construction (...)." <sup>44</sup>* In the design of *Zonnestraal Sanatorium* (1931) in Holland, all these ideas were synchronized and allowed a quick and cheap construction that responded to real requirements.

Throughout the 19th century and the beginning of 20th century, in many locations of Europe and the United States, these substantial theoretical debates on new simplistic and efficient ideas by different masters, were likewise intended as the *tabula rasa*<sup>45</sup> or in some situations as *palimpsest*<sup>46</sup> approach, questioned new values and beauty of their own. They settled a revolutionary base in the development of architecture and summed around the same concerns for a new beginning, a new society endowed with a new urban scenario with new orders, buildings, spatial concepts and ways of living. New methods and materials of many possibilities such as aluminum, steel, flexible plastic, glass blocks, polycarbonate, cor-ten steel, reinforced concrete or other materials, began to offer ever-increasing choices for architects that have settled a wider freedom of forms and expressions for architecture. These new uses of materials contributed to the purification of the aesthetics and accomplishment of new

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<sup>44</sup> Allen Cunningham, *Modern movement heritage*. London: E & Fn Spon, 1998, p. 148.

<sup>45</sup> From Latin *tabula rasa* refers to a blank slate that was erased, in this sense intended to make room also to be ready for something new. First was recorded around 1530, but it was defined by English philosopher John Locke (1632-1704) in his writings *Essays on the Law of Nature* (1676) and *Essay Concerning Human Understandings* (1689) referring to a child's mind in its primary state, pure sheet where his knowledge is formed through the sensorial experiences.

<sup>46</sup> *Palimpsest* is also a Latin term dated back to 1660, originally meaning parchment that was scratched again to serve as support; also, like *tabula rasa* is intended as a process of effacing for giving space for something new but where old traces are still notable. *Palimpsest* is the transformation and rewriting through time. A debate between past and present, old and new, traditional and modern.

concepts and design based on the developing technology and social needs. Ornament and decoration became a relevant subject, and the ideas about their simplification, with less and less domination or even their complete liquidation signified a new step in artistic experiences. This gave rise to a deeper level of the union between art and architecture that led to a significant change in experimental precepts and visualization of architecture.

*Ornaments are not aesthetic events that affect only style and taste but are rather symptoms that reveal a culture in transformation.*<sup>47</sup>

After 1900, the innovative, revolutionary trends, the fundamental elements, and extended precision were taking shape everywhere, and especially the territory of architecture was predominated by the exclusively change and novelty of artistic movements of the historical avant-garde and later periods, bringing ingenious forms and alterations in a permanent state of transformation. The Italian architect Giorgio Grassi (b. 1935), in his essay “*Avant-Garde and Continuity*” of 1980 stated that:

*Cubism, Suprematism, Neo-Plasticism, etc., are all forms of investigation born and developed in the realm of the figurative arts, and only as a second thought carried over into architecture as well.*<sup>48</sup>

Also, Sigfried Giedion remarked that in the new conception of the world such in *painting, construction, and architecture were used similar means to accomplish new tasks*<sup>49</sup> and this process brought along a considerable *all-too-common definition of architecture and art as entirely autonomous practices*<sup>50</sup> based on own nature, theory, personal or collective ideas and beliefs, excluding its decorative precursors.

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<sup>47</sup> Jörg H. Gleiter, (ed.), *Ornament today: Digital material structural*. Bozen: BU Press, 2012, p. 8.

<sup>48</sup> Giorgio Grassi, *Avant-Garde and Continuity*, in K. Michael Hays, (ed.) *Oppositions Reader: Selected readings from a journal for ideas and criticism in architecture, 1973-1984*. New York: Princeton Architectural Press, 1998, p. 393. In this essay Grassi expressed a critical attitude for the avant-garde architecture by presenting some own views, however there are always different opinions about everything, for instance for Sigfried Giedion modern architecture signified “happy prognosis” the philosopher Jürgen Habermas defined it as “dominant” and “cultural construct,” or for Kandinsky was “an epoch of great spirituality” meanwhile for art historian Hans Sedlmayr it was “unhappy pathology.”

<sup>49</sup> Giedion Sigfried, *Pintura e Arquitectura*, in Conceição Silva, Keil Amaral, [et.al.] *Arquitectura*, Lisboa: n°42, (Maio 1952), p. 18.

<sup>50</sup> Robert McCarter, *Starting with the square: Parallels in practice in the works of Josef Albers and Louis Kahn*, in *Journal of Visual Culture*. London: Sage, Vol 15, n°3, (December 2016), p.357-358.



## GESAMTKUNSTWERK

*Gesamt* (total, communal, collective) + *Kunst* (art) + *Werk* (work).

The German notion *Gesamtkunstwerk* that will appear in this work in different forms is an idea that embraces separate branches of art into a coherent synthesis and aims to end all boundaries between them. With roots in the 19th century Romantic movement old ideals, on the turn of the century, it has become an important art-historical concept encouraged and diffused in intelligent thinking and practices of many modernist artists and architects. And this sum of the arts mixing in multiple possibilities *will be an ideal that even after the historical vanguards and expressionism will not disappear in the twentieth century*.<sup>51</sup>

The idea of unification of the arts existed before under different formulations, such as “*common bond*” by Vitruvius “*teatro sacro*” (sacred theatre) in religious architecture of Roman Baroque, also here “*bel composto*” (beautiful assemblage), a term associated to Bernini that combined painting, sculpture, and architecture, or “unity of the arts” how pointed out the art historian Irving Lavin (b. 1927) in his notable study about Bernini’s total practice. “*Household of the arts*, selected by art historian Carl Rumohr (1785-1843), referred to an intuitive approach to art genres. Around the 1920’s “*collective of independent arts*” as described the German theater director Bertolt Brecht (1898-1956) the new unity from his works that were accomplished through montage, rather than a traditional organic whole.

In the 20th century, for instance, specific techniques from the fine arts passed into architectural context and resulted in a simple and complex combination of artistic disciplines. Like the principle of “collage” and “papier collé”, that in the paintings of Pablo Picasso (1881-1973) and Georges Braque (1882-1963) was transported especially into cubist architecture. Dadaist ideas were employed by the artist Kurt Schwitters (1887-1948) in his interior architecture, or by his own art concept “Merz” he reflected how to turn not just

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<sup>51</sup> Maria Alexandra Salgado Ai Quintas, *Decoração em Arquitetura: Ética ou Delito? Revisitando a questão do ornamento e apontando novos caminhos na fronteira das artes*. Artitextos nº 10, Gabinete Editorial e de Comunicação da FA-UTL, Lisboa, 2012, p. 9.

architecture but also an entire city into a work of art, or at least some part of it that would be an “*artistic necessity*” and many more examples.

The need to relate about the alliance of artistic fields and to define it persisted in different flows and always. In 1985 the Spanish philosopher and author Simón Marchán-Fiz (b. 1941) explained it through hypotheses of “*contaminations*”<sup>52</sup> that could occur in the epidermis and the deepest structure of the architectural organism. The same term was used by the French philosopher Jacques Derrida (1930-2004) for whom “*to contaminate*”<sup>53</sup> architecture, was to put it in communication with other arts. More recently, this intersection of different media can be observed as “*intermediary art*”<sup>54</sup> by architect Anthony Vidler (b.1941), explaining that artists are not just able to take reference of the three-dimensional but also, they make from architecture an integral part of their works, for instance in installations, and as well architects explore art, to escape the rigid codes of functionalism and formalism.

Julia’s Schulz-Dornburg (b. 1962) defines “*new affinities*”<sup>55</sup> as a search of shared experiences, influences and connections of disciplines. “*Double exposition*”<sup>56</sup> by architecture historian Beatriz Colomina (b. 1952); “*a place between*”<sup>57</sup> by architectural historian Jane Rendell (b. 1967) where are explored the spatial, the temporal and the social aspects; “*art architecture complex*”<sup>58</sup> or “*architecture vis-a vis art*” by Hal Foster; “*architectural transfiguration*”<sup>59</sup> by architect and professor Jorge Cruz Pinto (b. 1960) but also another interesting point of view by curator Delfim Sardo (b. 1962) that described this relation as “*an field without a name,*”<sup>60</sup> also in an interview (2016) Sardo accentuated that *in those blurred limits is where one can find the most interesting things.*<sup>61</sup>

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<sup>52</sup> Simón Marchan Fiz, *Contaminaciones figurativas*. Madrid: Alianza Editorial, 1986, p. 10.

<sup>53</sup> Jacques Derrida, in *Discussion with Christopher Norris*, in Andreas Papadakis, Catherine Cooke, Andrew Benjamin, (ed) *Deconstruction: Omnibus Volume*. London: Academy Editions, 1989, p. 72.

<sup>54</sup> Anthony Vidler, *Warped Space: Art, Architecture, and Anxiety in Modern Culture*. Cambridge, Massachusetts, London: MIT Press, 2000, p. VIII.

<sup>55</sup> Julia Schulz-Dornburg, *Art and architecture: new affinities*. Barcelona, Gustavo Gili, 2000, p. 7.

<sup>56</sup> Beatriz Colomina, *Doble Exposición: Arquitectura a través del arte*. Madrid: Akal, 2006, p. 6.

<sup>57</sup> Jane Rendell, *Art and Architecture: A place between*. London: IB Tauris, 2006, p. 13

<sup>58</sup> Hal Foster, *The art-architecture complex*. New York: Verso, 2011, p. XII.

<sup>59</sup> Jorge Cruz Pinto *O Espaço Limite: Produção e recepção em arquitectura, Volume II*. Lisboa: ACD Editores, Faculdade de Arquitectura da Universidade Técnica de Lisboa, 2007, p.57.

<sup>60</sup> Delfim Sardo, *When art speaks architecture: Building, unbuilding, inhabiting*, in Delfim Sardo, (ed.), [et.al.], *Let’s talk about houses: when art speaks architecture*. Lisbon: Athena, 2010, p. 43.

<sup>61</sup> <http://recontemporary.com/interviews/delfim-sardo/>

Furthermore, the concept of “*kissing*”<sup>62</sup> by critic and historian Sylvia Lavin that described the contemporary art, particularly multimedia installations and their visual and sensorial experiences that kiss the exterior and interior surfaces of buildings and confounds the division between fields; but also, as “*synthesis*” and “*dialogues*” (the word selected for this work) among others.

Despite these diverse denominations, they all reveal the same and perpetual interest of union between the arts and architecture, throughout the centuries, drawing our attention and giving us a substantial ground for exploration and research.

Returning to the term Gesamtkunstwerk, namely, it was first engendered in 1827 by German philosopher Karl Friedrich Eusebius Trahndorff (1782-1863) in his essay “Aesthetics, or teaching of philosophy and art.” In 1834, this concept was expressed by Gottfried Semper in his pamphlet “Preliminary remarks on polychrome architecture and sculpture in antiquity.” According to Austrian composer Josef Bayer, this essay consisted on the origin<sup>63</sup> for the term that today is universally associated with German composer, theoretician and art thinker Richard Wagner (1813-1883) that used to describe the total work of art that he settled out to create in his writings and opera compositions.

Semper and Wagner were friends, they had debates about art and many of their artistic visions coincided and found support in one another; likewise, the architectural historian and theorist Francis Mallgrave (b. 1947) stated that Wagner owes much to the artistic tutelage he received under Semper and the much bandied notion of a Wagnerian Gesamtkunstwerk possess an important, yet so far unacknowledged debt to Semper.<sup>64</sup> But also his theory was strongly related to many ideas of Romantic philosophers such as “whole and organic organism” of Friedrich Schiller (1759-1805), “aesthetic unification” or “the magic of several arts may work in one” as related Friedrich Schlegel (1772-1829), also Friedrich Schelling (1775-1854) description of theater as “the most perfect combination of all the arts” and other similar ideas.<sup>65</sup> Wagner

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<sup>62</sup> Sylvia Lavin, *Kissing Architecture*. Princeton, Oxford: Princeton university Press, 2011, p. 5.

<sup>63</sup> Josef Bayer, apud Harry Francis Mallgrave, *Gottfried Semper: architect of the nineteenth century*. New Heaven, London, Yale University Press, 1996, p. 363.

<sup>64</sup> *Ibid.*, p. 8.

<sup>65</sup> Matthew Wilson Smith, *The Total Work of Art: From Bayreuth to Cyberspace*. New York, London: Routledge, 2007, p. 11-14.

formulated his artistic understanding in his praxis but also theoretical works, especially in two essays first in “Art and Revolution” and then in “The Artwork of the Future,” both written in 1849. In these two works, he criticized the art fragmentation of modernity and expressed his appreciation for a harmonious unity present in antiquity, aspiring to reestablish their original collaboration of the arts.



Fig. 17. Parsifal, sequence performed at Metropolitan Opera House, New York, 1903.

As result, his visions for the reunification of a whole between singular artistic media like the three sisters (music, poetry, and dance), but also set design, scenography, painting, sculpture, architecture, human and social interdependence were summed and reinterpreted in his complete theater performances, that were inspired by the ideal unity of the ancient Greek model: their public art, the common aspect of realization, the combined artworks of tragedy and drama and especially their dialectic between Apollon (god of light and of the sun) harmony, restraint with Dionysus (god of the rebirth and force of nature and of festivals) chaotic, and non-restrained. Wagner also believed that the progress of the art derived from the perfect expression of the ancient Greeks, but as it could not be reborn, he affirmed that only artistic revolution, not restoration could give back that highest artwork of the future. This

Wagnerian concept of an effect of unitary intensity can be identified by some essential components that could compose it like: the principle of union in one meeting-place, the aspiration to totality, especially not individual but collective spirit of the creation that would cultivate social relationships, overcoming the borders between art and life, a combination of diverse ways of expression and others additionally, besides the sense of aesthetic construction, a primordial intention for which he aspired was the emotional impact.

That from this dialogue of word, action, image, and sound of artwork would embrace all human experience and would appeal to different senses through the three essential faculties that Wagner identified as the heart, body, and mind. This dream of totality was entirely achieved in many of Wagner's works, like *Tristan and Isolde*, *The Mastersingers*, and in his last work *Parsifal* in 1882. Paulo Ferreira de Castro (b. 1959) a Portuguese musicologist and author in his investigation about total opera of Wagner, noted that in his essays Wagner did not often use this iconic word of *Gesamtkunstwerk*, instead, he explained this phenomenon in different ways, for instance like in the following passage from "The Artwork of the Future":

*The great total work of art, which must embrace all artistic genres in order to a certain measure, to use each of these individual genres as a medium and to destroy them in order to achieve the common goal of all, namely, the unconditioned and immediate representation of human nature in its perfection, - this great work of total art, is not seen as a possible individual arbitrary act, but yes as something that necessarily has to be thought as a collective work of the humanity of the future.*<sup>66</sup>

After Wagner, *Gesamtkunstwerk* culminated in the Ballets Russes (1909-1929) directed by Sergei Diaghilev, under a union of music, dance, painting, architecture and costume; at the influent Bauhaus school, in the architecture of Walter Gropius (1883-1969); in the works of Van Doesburg (1883-1931), El Lissitzky (1890-1941), and many others.

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<sup>66</sup> Richard Wagner, *The Artwork of the Future* apud Paulo Ferreira de Castro, *A música visível: os ballets russes e o mito da obra de arte total*, in Margarida Acciaiuoli, Paulo Ferreira de Castro, *A Dança e a Música Nas Artes Plásticas do Século XX*. Lisboa: Edições Colibri, 2012, p. 144.

These unifying impulses of different artistic faculties, knowledge within knowledge, exchanges and especially the relationship that architecture establishes with art, we still can find in many architectural examples of our time, where artists and architects continue to explore this ground under many forms and combinations, planned collaborations or unexpected meetings, but also writings, investigations, conferences, workshops, academic lectures, because *the flames of the gesamtkunstwerk are never totally extinct*,<sup>67</sup> and many of us still aim at rediscovering its potential for the contexts of our times. For instance, the Danish architecture studio Bjarke Ingels Group in a project “Vancouver House” for Westbank Projects<sup>68</sup> a group of residential buildings, which are intended to work as a live-in sculpture and a synthesis of art, architecture, interior, urbanism, and the public, to bring visual splendor to daily life. These project drawings, and models, were presented with the concept in an exhibition in 2014 in Vancouver entitled Gesamtkunstwerk. And in this journey of creations which from beginning involve diverse disciplines is important to note a pivotal issue that American architect Peter Eisenman (b. 1932) advised in his reflection about Gesamtkunstwerk intent. Architecture must be careful not to colonize other disciplines, not to be superior to others in their dialogues, but in fact to use those disciplines in a way to open up its field, its own knowledge and to maintain diversity.<sup>69</sup>

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<sup>67</sup> Philip Ursprung, *What happened to the Gesamtkunstwerk? The Love-Hate Relationship Between Art and Architecture*, in Jes Fernie (ed), *Two Minds: Artists and Architects in Collaboration*. London: Black Dog Publishing, 2006, p.18.

<sup>68</sup> Westbank is a north American developer firm that from 1996 incorporate artworks in architectural context most of them within the urban environment. The firm also has a public art program. <http://westbankcorp.com/public-art/artists>.

<sup>69</sup> Peter Eisenman, *Gesamtkunstwerk as an Open System*, in Pierluigi Nicolini (ed), *op.cit.*, p. 25-26.

## EXPRESSIONISM

*The surrounding world had to be transformed into symbolic shapes denoting that inner meaning.*<sup>70</sup>

The term Expressionism originated in 1901 describing French paintings but was customary to call it German art at the beginning of 20th century. This movement had two centers: French Fauvism and German Die Brücke, founded in Dresden in 1905. Concentrated on the opposition to impressionist tendencies, literarily it was a new movement, expressing abstractly the artistic creation from inside to outside, and these new approaches are found even in works of post-impressionist painters Van Gogh (1853-1890) and Paul Cézanne (1839-1906). The developed philosophies by painters, like the “empty canvas” by Wassily Kandinsky (1866-1944) or “desert” by Maléevich (1878-1935), were a starting point of a broader research not just for painting but also for architecture and the organization of space.<sup>71</sup>

The first use of the term “*Expressionist*” concerning architecture was used by architectural writer Adolf Behne (1885-1948) in the art magazine *Der Sturm* (The Storm) of 1915, also here, in an article by the architect Bruno Taut (1880-1938) titled “*A Necessity*” this latter noted that painting started to be more abstract, structural, intensive, and architecture will follow this path *based on expression, rhythm, and dynamics, as well as on new materials such as glass, steel, and concrete (...) going far beyond the classical ideal of harmony*.<sup>72</sup> In 1919, Taut underlined the works of Fernand Léger, Kandinsky and others as a model for architecture. Expressionism in architecture started with the occurrence of the first world war (1914-1918) when there was a necessity to rebuild; and it appeared as a unifying form of all the arts where architects aspired to call man senses, and to give a possibility not just to see, but also to experience the expressionist character, and this was the opportunity for architecture to change *into something rather close to abstract sculpture*.<sup>73</sup>

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<sup>70</sup> Julius Posener, Kristin Feireiss (ed.) *Hans Poelzig: Reflection on his life and work*. Cambridge, Massachusetts, London: The MIT Press, 1992, p.8.

<sup>71</sup> Leandro Benevolo, *op.cit.*, p. 94.

<sup>72</sup> Bruno Taut, apud Alan Colquhoun, *Modern Architecture*. Oxford: Oxford University Press, 2002, p. 89.

<sup>73</sup> Julius Posener, Kristin Feireiss (ed.) *op.cit.*, p.8

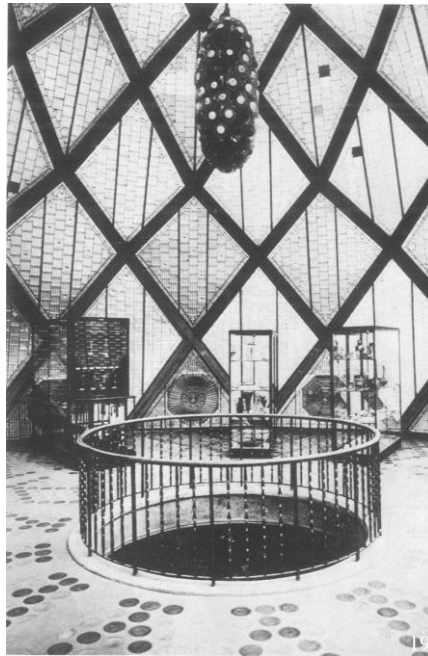


Fig. 18. Glass Pavilion vertical access, by Bruno Taut, Cologne, Germany, 1914.

Fig. 19. Glass Pavilion interior

Fig. 20. Glass Pavilion interior waterfall.



One of the first productions that represent a distinguished example of expressionist architecture is the *Glass Pavillion* by Taut, which was built in July of 1914 for the Werkbund exhibition, in Cologne. This temporary work was a demonstration construction of glass products, in a circular plan with a transparent structure of glass and metal where visitors could follow an expressive path of calibrated spaces of double-glazed glass block walls. The staircases, were predominated by effects of the dome with colored glass that was designed by *various artists (...) thus contributing to the kind of kinetic light experiments*.<sup>74</sup> Even more, the combination, with an internal cascading of water and colored mosaic walls, conferred an intense experience of an inner space revealing his vision of an *Alpine Architektur*. Taut's imaginary was also influenced by the aphoristic text of 1914 composed by his friend, the poet Paul Scheerbart (1863-1915) *Glasarkitektur* (glass architecture), that contained arguments and facts in favor of glass, where he described:

*"We live for the most part in closed rooms. These form the environment from which our culture grows. Our culture is to a certain extent the product of our architecture. If we want our culture to rise to a higher level we are obligated whether we like it or not, to change our architecture. And this will be possible only if we free the room in which we live of their enclosed character. This, however, we can only do by introducing a glass architecture, which admits the light of the sun, of the moon, and of the stars into the rooms, not only through a few windows, but through as many walls as feasible, these to consists entirely of glass - of colored glass. The new environment which we thus create must bring us a new culture."*<sup>75</sup>

Taut was the first one that demanded the implication of all the arts in architecture, and concerned on this idea, from 1918 to 1921 in Berlin, was organized a group known as the *Arbeitsrat für Kunst* (Working Council of Art) led by him, Adolf Behne and Gropius, also including other architects, painters, sculptors and art writers. They proposed together that architecture should become immediately a total work of art, created in cooperation with all masters. In their manifesto, it was assessed that:

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<sup>74</sup> Wolfgang Pehnt, *Expressionist Architecture*. London: Thames and Hudson, 1973, p. 76.

<sup>75</sup> Paul Scheerbart, apud William Curtis, *op.cit.*, p. 106.

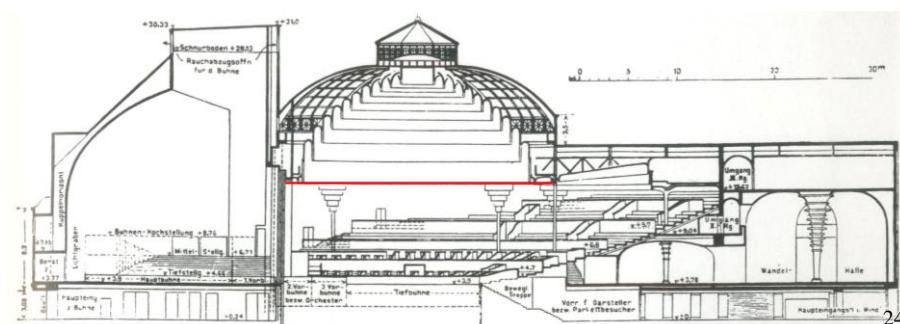
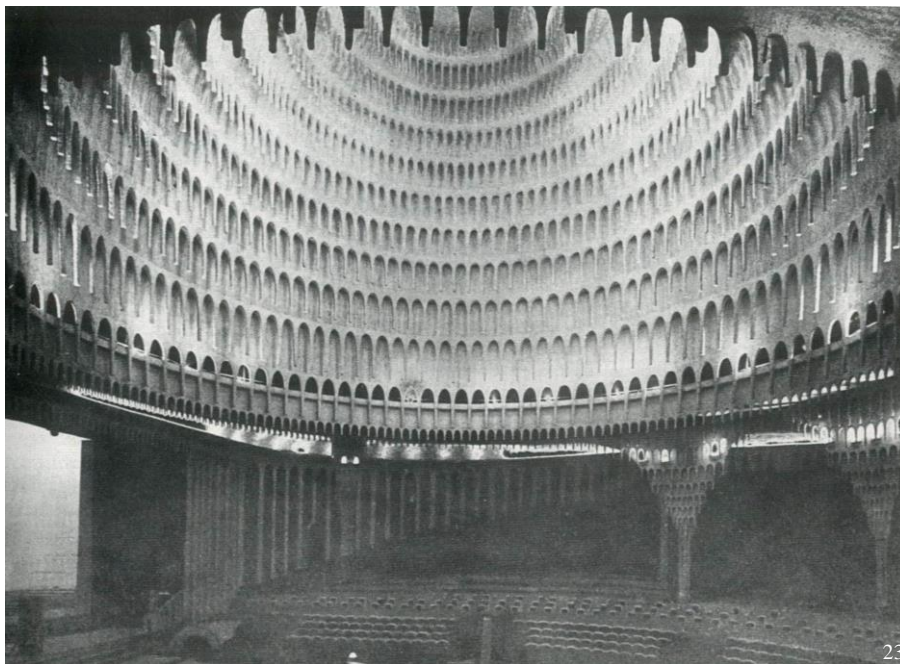


Fig. 21. Grosse Schauspielhaus, the foyer, by Hans Poelzig, Berlin, 1919.

Fig. 22. Grosse Schauspielhaus theatre auditorium in 1940.

Fig. 23. Grosse Schauspielhaus theatre in 1919.

Fig. 24. Grosse Schauspielhaus section, (up to red line in 1940 was covered).

*“Art and people must form an entity. Art shall no longer be a luxury of the few, but should be enjoyed and experienced by the broad masses. The aim is the alliance of the arts under the wings of a great architecture.”*<sup>76</sup>

Also, in the context of the Working Council of Art, in 1919, it was organized the “Exhibition for Unknown Architects”, where Gropius held a speech about the union of arts, the artists and architects. He would develop these ideas in his Bauhaus Manifesto and in the school, itself:

*Artists, let us at last tear down the walls erected between the “arts” (...). Let us all join together to desire, imagine, create the new architectural philosophy. Painters and sculptors, break the barriers to architecture to join us in the architectural process, strive with us to attain the ultimate aim of art: the creative conception of the cathedral of the future, which will once more be everything in one- architecture, sculpture and painting.*<sup>77</sup>

In the same year with the similar spirit of bringing the arts together emerged “Novembergruppe” (Group of November), from a collaboration of architects Bruno Taut, Walter Gropius, Erich Mendelsohn (1887-1953), El Lissitzky, with the artist Lyonel Feininger (1871-1956), and others that were responsible for the reconstruction, and new society requirements.

Another notable example conceived as a work of art was the theater *Grosse Schauspielhaus* (fig. 21, fig. 23, fig. 24) in Berlin also known as “The theatre of the five thousand.” Converted from an existing market hall into a theatre was designed by Hans Poelzig and completed in 1919. The building was notable for its pale yellow color in the interior and burgundy red on the exterior. Poelzig felt that it was essential to remodel surfaces sculpturally, in the main foyer, the plastic lines of a central column continued to ceiling and walls, and the new interior was designed as a fantastic sculptural spectacle, where the considerably detailed dome looked as a space-cave covered with many plaster pendants. As in Expressionist architecture color had a significant role, these ornaments were differently colored in shades of red, green and yellow, recalling grotto stalactites.

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<sup>76</sup> Kenneth Frampton, *op.cit.*, p. 117.

<sup>77</sup> Julius Posener, Kristin Feireiss (ed.) *op.cit.*, p. 19

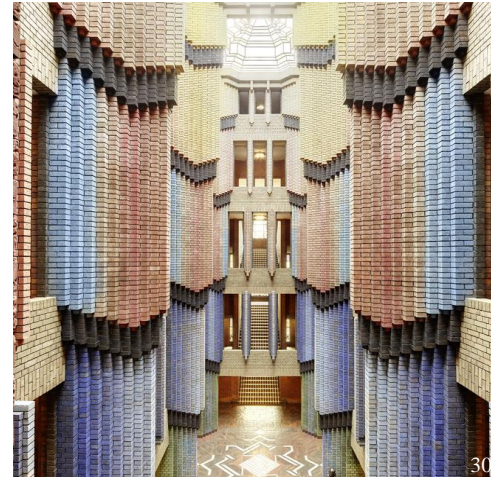
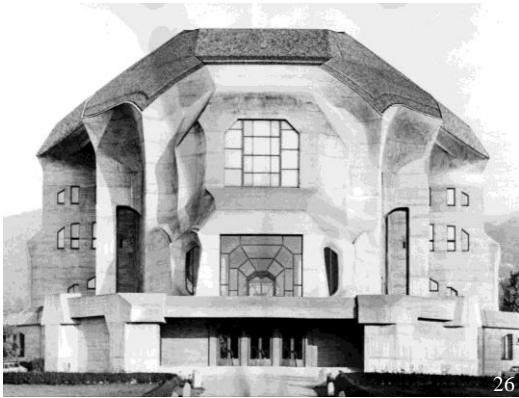


Fig. 25. Construction of first Goetheanum, by Rudolf Steiner, 1913.  
 Fig. 26. Second Goetheanum by Rudolf Steiner, 1928.  
 Fig. 27. Einstein Tower by Erich Mendelsohn, Potsdam, 1924.  
 Fig. 28. The big auditorium of the second Goetheanum, painted ceiling.  
 Fig. 29. The big auditorium of the second Goetheanum, view of stained glass.  
 Fig. 30. The Farbwerke Höchst, entrance hall, Peter Behrens, Frankfurt, 1924.

Later in 1933 the stalactites details were hidden with a hung ceiling when Nazis took over (fig. 22). Even though for Nazis this building was an example of Degenerate Art it wasn't demolished at that time.

An example of a total work of art that didn't achieve the deserved importance in the history of architecture was the Goetheanum in Dornach, a world center for the Anthroposophical movement that was designed by Rudolf Steiner (1861-1925), who was the founder of Anthroposophy. The Goetheanum building dates from 1913 to 1920, its base was built from reinforced concrete, and the rest of construction was executed from wood with a sculptural treatment. To obtain a spiritual character of the interior atmosphere, Steiner collaborated with artists and craftsmen that he oriented. For the vertical surfaces, it was used a technique of overlapped wooden boards that permitted sculptors to carve the walls and columns and give them some kind of plastic effect. The double dome was decorated by painters with symbolic and colorful paintings, representing human evolution and the stained glass had also a symbolical chromatic sequence. In New Year's Eve of 1922-1923, the building was destroyed by a fire. The Portuguese philosopher Jacinto Rodrigues (b. 1939) tried to synthesize the architecture and aesthetics of Rudolf Steiner in seven interconnected points, and one of them is that:

*an architectonic work it is inscribed in a total work of art (Gesamtkunstwerk) as a result of a holistic approximation or of "total being."*<sup>78</sup>

Then followed the second Goetheanum, completed in 1928 it was built in concrete and bigger comparing to the first one, *but further developed the methodology of art and technique.*<sup>79</sup> It was designed to harmonize with the local topography and was surrounded by other sculptural buildings serving for various functions. In the interior persisted the painted windows with green, blue, purple and pale rose nuances in succession, depicting anthroposophist fragments that contributed to enhance the aesthetic qualities of the building. For the colorful ceiling, paintings have been reused on the theme about human development and columns recurred the sculptural form of the first building.

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<sup>78</sup> Jacinto Rodrigues, *A arte e a arquitectura de Rudolf Steiner*. Porto: Civilização, 1990, p. 32.

<sup>79</sup> *Ibid.*, p. 24.

*“The second Goetheanum was an attempt that pretended to respond in an integral manner the question of morphology, structure and function.”*<sup>80</sup>

Besides the Grosse Schauspielhaus and Goetheanum, other several projects focused on the life of people and were built for the public purposes as the Sternkirche project in 1922 by Otto Bartning (1883-1959) or the People’s theater by Vassili Luckhardt (1889-1972), all serving a sense of mass culture, with commercial, recreational, festive or religious purposes. The praise for the clarity and purity of the Expressionist period was also inspired by the crystal forms. Those same concepts were applied, both as in the total volume or just in the interior limits of a building, for instance, in the interior of the Farbwerke Höchst office building (fig. 30), built between 1920 and 1924 near Frankfurt, designed by Peter Behrens (1868-1940). In the central court he employed bricks and rotated them into a crystalline atmosphere, stones also were colored in the expressionist color pallet illuminated by a milk-glass ceiling and – similarly to other expressionist projects - *metamorphosed to stalactites, the piers seems almost to hang from an unknown vault.*<sup>81</sup>

In every case, expressionist buildings were meant to be a fully sculptured architectural entity, and this was achieved through the generalized use of concrete, a new fluid material that allowed thus to create plastic surfaces that were therefore as if “molded” by light itself. A building of this movement, that compressed a sculptural form and the way it received and projected sunlight was Einstein Tower (fig. 27), at Potsdam (1919-1924). It consisted of a center for scientific search and astronomy designed for physicist Albert Einstein by Mendelsohn, *a born expressionist.*<sup>82</sup> The tower united an underground research laboratory with a triumphant domed observatory; it was built as a unique block of reinforced concrete frame and brick that attempted at representing the ideas of a wavy motion, and reveal an entire plasticity with complicated warped surfaces without angles, which made this tower *undoubtedly an evocation to sculpture.*<sup>83</sup>

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<sup>80</sup> Ibid., p. 23.

<sup>81</sup> Stanford Anderson, *Peter Behrens and a new architecture for the twentieth century*. Cambridge, London: The Mit Press, 2000, p.226.

<sup>82</sup> Bruno Zevi, *Erich Mendelsohn: The complete works*. Basel; Boston: Birkhäuser, 1999, p. XLI.

<sup>83</sup> Giulio Carlo Argan, *Arte Moderna: Do Iluminismo aos movimentos contemporâneos*. São Paulo: Companhia das letras, 1992, p. 247.



## CUBISM

Cubism in architecture was denominated as Czech cubism and was centered in the city of Prague, in the Czech Republic, the once called Bohemia, between 1909 and 1925. This contrast architectural style of that time was the first modernist trend that rejected the realist and historicist traditions of the Renaissance, willingly tending not only to aspects of diamond vaults compositions of late Baroque and late Gothic periods, but also to some ideas of neoclassical styles: its formal concepts *culminated in a modern sublime*.<sup>84</sup>

Czech architects were influenced by the impulses of French cubist paintings of Georges Braque and Pablo Picasso that, in 1906, was the pioneer of this movement thus opening the way to some artistic revolutions. Starting in 1911 in Prague, art historian Vincenc Kramář (1877-1960) acquired collections of works by these two painters and organized exhibitions in the Czech capital that captured the imagination of local architects. And from these initiatives, the emotions, the fractured, flattened, slanted or deformed abstractions of compositions from two-dimensional artworks started to be poetically reinterpreted into the three-dimensional architectural framework.

It had a rapid evolution with varied programs, interpretations, and rediscoveries of plastic form as a visual expression. The technique of collage and assemblage, initially practiced in cubist paintings by Picasso also gave way to three-dimensional exploration. The American art critic Clement Greenberg (1901-1994) in his text “*Collage*” (1958) explained that Picasso extruded some elements to form a bas-relief from the literal pictorial surface and *by this act he founded a new tradition and genre of sculpture, the one that came to be called “construction.”*<sup>85</sup> These ideas were employed in architecture, and later after cubism, we can see how the principles of assemblage and collage construction, as well as the search for unusual beauty in ordinary things, were used in the interior of the already quoted work Merzbau (1923-1937), in Germany, by Kurt Schwitters. Mainly the cubist solidity, the equilibrated composition of oblique, diagonal or prismatic forms

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<sup>84</sup> D. Kevin Murthy, *Cubism and the Gothic tradition*, in Eve Blau, Nancy J. Troy (ed.) *Architecture and Cubism*. Cambridge: The Mit Press, 1997, p.72.

<sup>85</sup> Clement Greenberg, *Art and Culture: Critical Essays*. Boston: Beacon Press, 1989, p. 80.

were applied as a focal point to façades of new and renovated buildings like an outer envelope; but for inner space cubism represented a problem of practicality, and architects started to concentrate their search to a dynamic design for furniture, ceramics, and even wallpaper design.

Four early prominent architects included Josef Gočár (1880-1945), Pavel Janák (1881-1956), Vlastislav Hofman (1884-1964), Josef Chochol (1880-1956), as well as sculptor Otto Gutfreund (1889-1927) - that collaborated with some architects in reliefs of buildings and bridges, - and painters such as Emil Filla, Josef Capek, and others, were part of "*The Group of Plastic Artists*" (Skupina Výtvarných Umělců). From 1911 to 1914, they set up their magazine "The Arts Monthly" (Umělecký měsíčník) that explained Cubism in terms of painting, sculpture, and architecture. They did not focus on building materials but were more concerned about the issue of exterior form, and in giving multiple views of vibrant and broken surfaces of façades, windows, doors, similar to diamond or angular faceting.

Janák designed the Hlávka Bridge in Prague (1911) with a dynamic movement, wavy form, cubist details and integrated sculptures by Gutfreund. In 1913, he ingeniously reconstructed the Fára House in Pelhřimov, where the existing Baroque style of the building was harmoniously contrasted with cubist forms added into the main façade. Czech author Ivan Margolius (b. 1947) pointed that it represents an example where the adoption of cubism in restoration improved the image of the past. Janák, a leading as well cubist theorist, provided several influent essays. In "*From modern architecture to Architecture*" (1910) he wrote that to achieve beauty is not by adding details like in the rich Baroque but by construction. In "*The prism and the pyramid*" (1911) he called for a review of the Baroque that dominated the country, and in this theory, the new architectonic cubist projects were based on the form and space where the triangle and the pyramid were the privileged forms that aimed at obtaining optical effects. In the article "*Renewal of the Façade*" (1913) Janák explained that the purpose of cubist architectural design lays in the "*space (that) must be created by plastic shaping of its limiting surfaces,*"<sup>86</sup> more specifically he *defined the wall as a sculptural termination of the space*

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<sup>86</sup> Pavel Janák apud Jaroslav Vokoun, *Czech Cubism*, in James Richards; Nikolaus Pevsner, [et.al.] *The Architectural Review*, vol. 139, n° 829, London, (March 1966), p. 231.



which in turn determines the movement of space,<sup>87</sup> also persisted many texts by other cubist members concentrating on various contents about architecture, space, transformation, furniture, and others. Main Prague cubist project that replaced an old structure on a corner site was the multifunctional House of the Black Madonna, designed by Josef Gočár, between 1911 and 1912. This project of a new style successfully integrated with historical surroundings was enclosed by Baroque buildings. Façades, massive pilasters at the main entrance and windows represent a dynamic composition of cubist inspired elements that create an unusual interplay of light and shadows, also inside the sculptural staircase its iron banister and newel, cafés furniture, delicate lamps, and other details implement practical and aesthetic functions. A combination of frozen symmetrical cadence he displays in the long and low façade of the sanatorium at Bohdaneč (1912-1913). Where the first-floor windows and front wall are enhanced by a zigzag concept while the second floor maintains a flat surface, for the planning of interiors was challenging to apply Cubist principles, and divisions remained clear, symmetric.

Josef Chochol built Villa Kovařovic (1912-1913) in Prague, the theme of cubic and crystal elements was applied not just to the building but also to the gate, iron fence and garden that configured a new conception of spatial experience, also, persists the play of light and shadows created by the intersection of oblique and flat planes. The Hodek Apartment complex (1913-1914) on Neklanova street, was articulated with the same geometric core and hexagonal disordered windows at the first floor, a little time its exterior had a dark color representative to gothic and then was substituted by white, also like transferred from late gothic is the thin column situated on the corner of this housing block. In his text *“On the function of Architectural Component”* (1913) he referred about his taste for the Gothic style but appointed the wish to create something new and individual.<sup>88</sup> According to Margoulis all cubist architects: *“Exceptionally (...) sought a total integration of the painting and sculptural thinking into architecture. (...) The finished house was, at the same time, a sculpture, a painting and a dwelling.”*<sup>89</sup>

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<sup>87</sup> Wolfgang Pehnt, *op.cit.*, p. 61.

<sup>88</sup> Rostislav Svacha, Kenneth Frampton, Eric Dluhosch [et.al.], *Architecture of New Prague 1895–1945*. Cambridge, Massachusetts: MIT Press, 1995, p. 140.

<sup>89</sup> Ivan Margolius, *Cubism in architecture, Bohemia 1909-21*, in Helen Castle (ed), *Art+Architecture. Architectural Design*, vol. 73, n°3, London, (May/June 2003), p. 34



Fig. 31. Houses at L'Estaque by Georges Braque, 1908.  
 Fig. 32. The Reservoir, Horta de Ebro by Pablo Picasso, 1909.  
 Fig. 33. Hodek Apartment building, façade detail. By Josef Chochol, 1913-1914.  
 Fig. 34. House of the Black Madonna of Josef Gočár, 1911-1912.  
 Fig. 35. Josef Chochol: Kovařovič Villa, 1912-1913.  
 Fig. 36. Hodek Apartment façade (dark variant).  
 Fig. 37. Hodek Apartment corner entrance (white variant).

In France, architecture wasn't a part of cubism the only work like Prague projects was La Maison Cubiste (1912) commissioned by Salon d'Automne Mare to the sculptor Raymond Duchamp-Villon (1876-1918). The existing traditional façade of the exhibition building was reconverted into a plastic treatment with plaster moldings of crystalline shapes above the main door and windows and by this process was achieved to correlate the cubist artworks that followed to be exposed in the interior with the exterior cubist forms.

*Duchamp-Villon felt that architecture served as a framework for all the arts permitting their cohesion within a logical grouping and thereby incorporating them as an integral and practical part of society's daily life.*<sup>90</sup>

Ivan Margolius stated that this movement celebrated the bonds between painting, sculpture and architecture, and that all cubist works were paving stones to the future and neared to works of Soviet Constructivists and purist architecture of Le Corbusier. Also, should be enhanced the importance of Siegfried Giedion's work *Space, Time and Architecture* (1941), where he compared several concepts like the vertical grouping of planes or expanded transparency that permits to see simultaneously interior and exterior as in the front and profile of the figure from Picasso's painting *L'Arlésienne* (1912). With the later building of Bauhaus, Dessau (1926) by Gropius and Hannes Meyers (1889-1954) those extensive, transparent areas and dematerializing corners, allow the relation of overlapping, which appear in the painting.<sup>91</sup> This essential comparison between fields *offered evidence of the historical progression from painting to architecture.*<sup>92</sup>

American architectural historian Henry Russell Hitchcock (1903-1987) was the next who also provided the aspects of the connection between modern painting and architecture in his book *Painting Toward Architecture*, of 1948. Moreover, architectural historian Colin Rowe (1920-1999), in partnership with artist Robert Slutzky (1929-2005) wrote in 1955 - but was only published just in 1963 - a text entitled *Transparency: Literal and Phenomenal*, where there

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<sup>90</sup> Ivan Margolius, *Cubism in architecture and the applied arts*. London: David & Charles, 1979, p.44.

<sup>91</sup> Giedion, Sigfried, *op.cit.*, p. 493-495.

<sup>92</sup> Detlef Mertins, *Anything but literal: Sigfried Giedion and the reception of cubism in Germany*, in Eve Blau, Nancy J. Troy (ed.) [et.al.] *op.cit.*, p. 232.

were studied the similar characteristics and proprieties in cubist painting and modern architecture, namely the question of modernist term “transparency.” Spanish art historian Juan Carlos Rico pointed out that in general all movements derive from cubism, and their search focuses on the following points: pure arts, geometric rules as the primary character, chromatic and tactile rules as secondary character and objectification which is the relation between form and function in architecture.<sup>93</sup> Siegfried Giedion in the already mentioned work also sustained this same idea, affirming that Cubism did give force and direction to artistic imagination in other fields and awakened various styles such as Purism, Constructivism or De Stijl.<sup>94</sup> Also in 1936, American historian and first director of the Museum of Modern Art in New York, Alfred Barr (1902-1981) - for the exhibition Cubism and Abstract Art at the same museum - presented a chronological diagram. That showed cubism as a central source for the development of the following art movements and its *direct relationship*<sup>95</sup> with modern architecture. Piet Mondrian (1872-1944), one of the protagonists of the latter, De Stijl, also assessed that the new abstract image and its features, like linear elements or articulations of planes were initiated in Cubism.<sup>96</sup>

The outbreak of the first world war left a mark on the movement; some architects emigrated, others were drafted into the army, the art magazines and main artist groups ceased their activity, then emerged others. In 1918, was developed the curvilinear style *Rondocubism* which employed colors, circle, rounded forms and sections especially in works of Janák, Gočár or Hofman, Chochol continued with a purist style. The end of the Avant-Garde in this country took place after second world war (1939-1945), when it became a part of the Soviet Union (1948-1990) and, as the regime changed, also artistic movement changed.

*“What is really notable about this Cubist development in architectural creativity was the seemingly total integration of the painting and sculptural thinking into realistic architecture.”<sup>97</sup>*

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<sup>93</sup> Juan Carlos Rico, *op.cit.*, p. 183.

<sup>94</sup> Siegfried Giedion, *op.cit.* p.439.

<sup>95</sup> Beatriz Colomina, *op.cit.*, p. 17.

<sup>96</sup> Simón Marchán Fiz, *op.cit.*, p. 194.

<sup>97</sup> Ivan Margolius, p. 44. *op.cit.*, p. 13.

## FUTURISM

Architecture has been developed over the years evolving from one style to another. The various movements that first appeared in the plastic arts evidently were passed on to architecture, not only just as aesthetics, but as a sum of abundant ideas and practices that conformed design of both interior and exterior spaces.

The period of Futurism that first appeared in Paris with the manifesto of Filippo Tommaso Marinetti, having proceeded next to Italy was very relevant. Like other avant-garde movements, it tended to search a new expression of the construct of time and translate the historical moments that passed through the society, and namely here will persist some ideological extensions from Cubism. It was initially as a poetic and literary movement led by Filippo Tommaso Marinetti (1876-1944) that published the Futurist postulates, together with its Manifesto in the Parisian daily publication *Le Figaro*, on the 20<sup>th</sup> February of 1909. It was also followed, in the same period, by several publications in Italian magazines. Marinetti denied the art of the past as something absolutely outdated and, through his eleven manifestoes, he tried to destroy the worship of the past, and simultaneously abolish the despotism of the academies. He developed a contrary trend towards realism, tending to the reconstruction of new values, thus embracing revolutionary change, mechanical speed, energy, dynamism, and freedom.

New sensibilities of futurist ideas were extended into various forms of cultural production. In painting and sculpture manifestoes by Umberto Boccioni (1882-1916). In 1910 “The Futurist Manifesto of painting” was published, in cooperation with other artists, while in 1912 followed the “Technical Manifesto of Futurist Sculpture” reflecting the new reality and actuality of time. Paintings with complementary colors, straight lines, fragmentation, puzzling and repetition of forms, among other concepts, helped to emancipate the new architectural design and tectonics.

*And it was painting that inspired the Futurists architectonic visions.*<sup>98</sup>

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<sup>98</sup> Giovanni Lista, *Art and Architecture in Futurism*, in Germano Celant, *Architecture & Arts 1900/2004*. Milan: Skira, 2004, p. 22.

Paintings themselves were based on architectural subjects where the city, urban space with its artificial light, noise, machines in a plastic dynamism played a principal role in compositions, as the “*Memory of a journey*” (1911) by Gino Severini (1883-1966), a floating accumulation of architecture and various transports with vibrant colors where entirely were avoided the static and regular forms or “*The street enters the house*” of 1912 (fig.38) by Boccioni expressing a spectacle of dynamism that depicted the entire urban landscape, with the collapsing façades and people; but also diverse details of motion of the city like “*Dynamism of a Dog on a Leash*” (1912) by Giacomo Balla (1871-1958), “*Armored Train in Action*” 1915 (fig. 39) by Severini, and others.

Also, the new form of the sculptures was *architectonic*,<sup>99</sup> and its materials such as glass, celluloid, iron, electric light or others did contribute to increase futurist effects. In 1913, Boccioni started to develop dynamism in sculptures and called them *architectonic constructions*. Those works anticipated Constructivism and Tatlin’s tower of 1920. He exemplified the tick-tock and the moving hands of a clock, the fury of a flywheel or the turbine of a propeller, the rotation of two cogwheels, as rhythmic media from which Futurist works should take account.<sup>100</sup>

The architectural historian and critic Wolfgang Pehnt (b. 1931) observed that Boccioni had the idea of environment sculptures which were projected into space to give it sculptural form. In his book, *Futurist painting sculpture-plastic dynamism* (1914) Boccioni demanded that: *painting and sculpture could also be applied to architecture*,<sup>101</sup> but not as a decorative purpose or isolated volumes but as an interpretation of masses and plans of the buildings.

Around 1914, deriving from painting, Futurism made its appearance in architecture. With the same concerns of the rejection of previous traditions, overlaid decoration or symmetry, as well, was utterly focused on influential manifestoes that encouraged the development of modern architecture, based on the progress of science and technology, dynamic, motion, light, and air, all

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<sup>99</sup> William Curtis, *op.cit.*, p. 108.

<sup>100</sup> Umberto Boccioni, *Technical Manifesto of Futurist Architecture*, in Joshua Taylor, *Futurism*. New York: Museum of Modern art, 1961, p.131.

<sup>101</sup> Wolfgang Pehnt, *op.cit.*, p. 170.

these worked as a radical renewal and restructuration of Italian architecture, being perceived as a *total revolution in everyday culture*.<sup>102</sup>

Futurist architecture was an urban architecture and a center of the movement, its foundations, and its new aesthetical possibilities were constituted in various manifestoes published in 1914. “*Futurist Architecture*” by Enrico Prampolini (1894-1956), Boccioni’s “*Technical Manifesto of Futurist Architecture*,” the book “*Futurist Architecture*” by Virgilio Marchi (1895-1960), and by the most celebrated architect Antonio Sant’Elia (1888-1916) the famous text “*Messaggio*,” in which Marinetti saw a revolutionary writing on architecture and invited him to join the futurist group. Marinetti introduced some changes to *Messaggio* and reconverted it into “Manifesto of Futurist Architecture”, in which Sant’Elia proclaimed that everything must be reinvented and rebuilt, and that modern building must be like a gigantic machine of cement, glass, and iron without decorations, and beauty will be found in its simplicity. He also affirmed that, just as the ancients used to draw their inspiration of art from natural elements, his generation must observe the motivation in the features of the new mechanical world, from which architecture will reach the finest expression as well as the most effective artistic integration.<sup>103</sup>

In the same year, at the exhibition of *Nuove Tendenze*<sup>104</sup> were presented drawings by Mario Chiattone (1891-1957) and Sant’Elia in which they imagined the *Città Nuova*, a new metropolis of the future that was highly industrialized in multilevels and interconnected by elevated platforms or underground passages where was integrated the city’s traffic and speed. As futurists aspired for dynamism, their attention was focused in the spiral, symbolizing a *continuous upward movement*.<sup>105</sup> In this sense can be conceived the elevators along façade, climbing as serpents made of iron and glass. In the conceptual designs of *Città Nuova* were also presented new building forms, and proposals for airports, train stations, airship hangars, electricity generating stations, motorways or pyramidal apartment blocks called *Casa a Gradinate*.

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<sup>102</sup> Alan Colquhoun, *op. cit.*, p. 99.

<sup>103</sup> Antonio Sant’Elia, *Futurist Architecture. Manifesto*, in Germano Celant, *op. cit.*, p.112.

<sup>104</sup> Nuove Tendenze was an architectural group initiated in 1912 by Sant’Elia in collaboration with Mario Chiattone and others.

<sup>105</sup> Wolfgang Pehnt, *op.cit.*, p. 174.



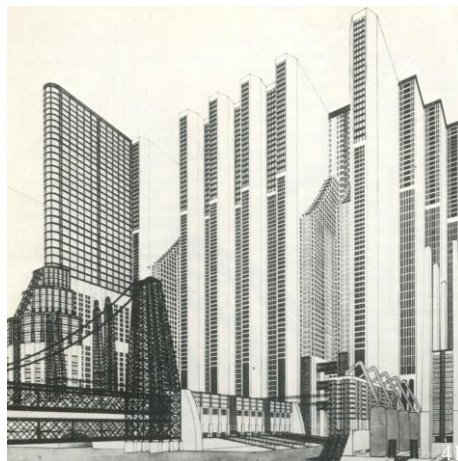
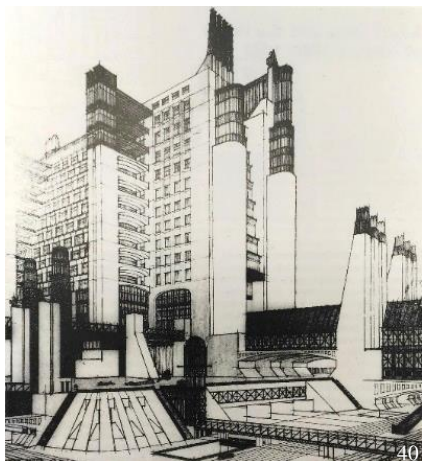


Fig. 38. Umberto Boccioni, *The Street Enters the House*, 1912.

Fig. 39. *Armored Train in Action*, 1915 by Gino Severini.

Fig. 40. *Modern metropolis* by Chiattonne, 1914.

Fig. 41. *Città Nuova, Casa a Gradiate*. by Sant'Elia, 1914.

Fig. 42. *Founding Estate* building by Patrick Hodgkinson in London, 1973.

Fig. 43. *Untitled*, light artwork by Dan Flavin at Chiesa Rosa church, Milano, 1996.



While the manifesto expressed lightness and permeability, their drawings expressed the values of mass and monumentality.

The first world war had a destroying effect on the Futurism, Sant'Elia at twenty-eight years old died in the war, and his architecture was not built, but his ideas and drawings had an important influence in the avant-garde circles.

The interest in Futurism made its appearance again in 1928 when artist Luigi Colombo Fillia (1904-1936) organized the only "*First Exhibition of Futurist Architecture*" with works by architects Sant'Elia, Chiattoni, Alberto Sartoris, Prampolini, the interior decorators Ivo Pannagi, Giacomo Balla, and other various artists. In Italy Futurism culminated in 1932 at the Exhibition of the Fascist Revolution that was organized by a collaborative of architects' designers and painters.

Futurism was short-lived and remained a movement where *as in the expressionist architecture, though for different reasons, the individual arts (...) come together in a total restructuring of the environment*,<sup>106</sup> and it served as inspirational background for upcoming masters. As a good example can be considered the form and style of residential building Founding Estate in London (1973) by Patrick Hodgkinson (1930-2016), with its multilevel concrete frame, with elevated walkways leading to apartments and accentuated inclinations on the façade, repeating the idea of pyramid totally recalling the futurism drawings by Antonio Sant'Elia.

After the period of Futurism at that time in a fascist Italy was formulated a sort of Rationalist architecture, but under the regime of Benito Mussolini (1883-1945) leader of the authoritarian party, emerged the concept of synthesis of the arts as prestige. Mussolini's preferred architect was Marcello Piacentini (1881-1960) that designed buildings combined with art destined for the wide public and accentuating the political ideology and authority. Piacentini collaborated with artists for instance with Mario Sironi (1885-1961) that created numerous mosaics for architectural limits. One of the most remarkable mosaics of Sironi was for the building of 6th Milan Triennale (1936) in front of the monumental and emblematic staircase by Giovanni Muzio (1893-1982)

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<sup>106</sup> Wolfgang Pehnt, op.cit., p. 170.

an architect who also collaborated often with Sironi. Here it is interesting to remark the possibility of the combination of art and architecture between different epochs. Like the case of the Chiesa Rossa church in Milano build by Muzio between 1930 and 1932, that in the process of its restoration in 1996 was invited the American minimalist artist Dan Flavin (1933-1996) who created his last site-specific artwork “*Untitled*” (fig. 43) that enhanced all interior. The light artwork typically to Flavin parlance was made of simple light tubes of different color renditions (green, pink, blue, ultraviolet and radiant gold as Byzantine mosaics) that accentuated specific architectural elements and are the unique light source in the interior creating a spectacle of visual effects. *In a reciprocal manner, the art is informed by the host and the host is transformed by the art.*<sup>107</sup>

After 1940 in Italy and other parts was developed the *Movimento di Arte Concreta* that was the *most devoted to the concept of a synthesis between architects and artists*,<sup>108</sup> founded by artist Bruno Munari (1907-1998) and others. After Le Corbusier lecture “The Synthesis of the Arts” at the Venice Biennale of 1952 this movement increased its presence. Munari started to extend the French Corbusian synthesis, through works, exhibitions and assorted manifestos like “Arte totale,” “Arte organica” and others. And this strategy again searched to contemplate a new relationship between painting, sculpture, and architecture.

And at that period emerged new types of art confluence with interior such as Lucio Fontana’s (1899-1968) neon light artworks but also his *ambienti* (environments) that modified the physical and visual perception of interiors pre-established by the purchaser; ephemeral installations by Alberto Biasi (b.1937). Also, emerging artistic groups like Miriroma, Gruppo T expressed:

*Our work stems from the recognition of new materials as new expressive means in which there can be no longer a separation between architecture, painting, sculpture and industrial production.*<sup>109</sup>

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<sup>107</sup> Liliane Wong, *Adaptive reuse: Extending the Lives of Buildings*. Basel: Birkhäuser, 2017, p. 178.

<sup>108</sup> Romy Golan, *Italy and the Concept of the “Synthesis of the Arts,”* in Eeva-Liisa Pelkonen, Esa Laaksonen (ed.) *Architecture+Art. New visions, New Strategies*. Helsinki: Alvar Aalto Academy, 2007, p. 70.

<sup>109</sup> *Ibid.*, p. 79-80.

## DE STIJL

*New aesthetic for architecture is that of new painting.*<sup>110</sup>

In the spring of 1917, in Holland, a group of artists and architects Vilmos Huszár (1884-1960), the sculptor Georges Vantongerloo (1886-1965) the poet Antony Kok (1882-1969), Pieter Oud (1890-1963), Bart van der Leck (1876-1958) and Piet Mondrian, and others under the leadership of Theo van Doesburg founded the most influential movement De Stijl, (meaning “The Style”, in Dutch), also known as neoplasticism, in what regards painting. That had a fundamental importance in modern European architecture and was *the final break with Traditionalism*.<sup>111</sup> This movement set the belief that total design environment could be only achieved by collaboration between artists and architects. Central to the group’s development was Piet’s Mondrian visions, *his theories about color and space were the basis of De Stijl’s language*.<sup>112</sup> The involved experiences of this movement restructured the relation between art and architecture, as an idea to establish new art in people’s everyday environment, and it lasted fourteen years. De Stijl was characterized by a separate spatial conception; usual symmetry was replaced by dynamic imaging and asymmetrical balance; closed volumes were emphasized with extensions of pure colored planes capable of evidencing architectural values. The compositional grid present in the paintings was also the basis for new architectural plans and elevations. In the autumn of the same year, van Doesburg and Mondrian founded the monthly magazine *De Stijl*, setting a stylistic credo that raised the mattering subject of the relation between visual art and architecture. Also, in the first issue, the painter der Leck, based on some of his own experiences with architects, wrote two articles about the cooperation possibilities of art and architecture in the future, and he remarked:

*“Modern painting has now arrived at the point at which it may enter into collaboration with architecture. It has arrived at this point because its means of expression have been purified.”*<sup>113</sup>

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<sup>110</sup> Simón Marchán Fiz, *op.cit.*, p. 194.

<sup>111</sup> Ivan Margolius, *op.cit.*, p. 101.

<sup>112</sup> Mildred Friedman (ed.) *De Stijl: 1917-1931 Visions of Utopia*. New York: Abbeville, 1982, p. 7.

<sup>113</sup> Bart Van der Leck, apud Alan Colquhoun, *op. cit.*, p. 112.

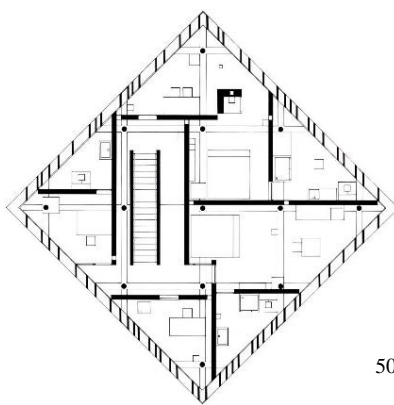
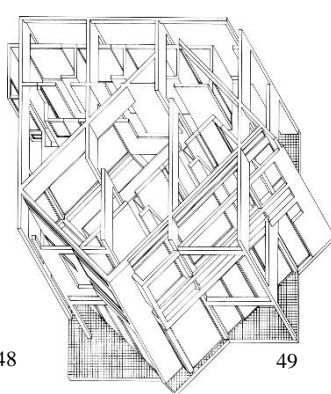
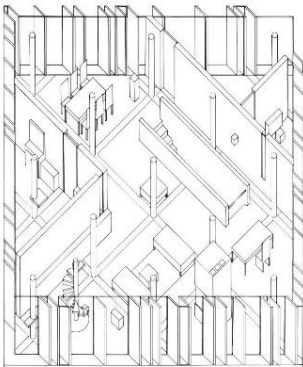
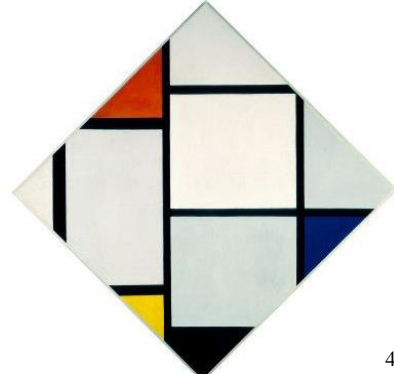
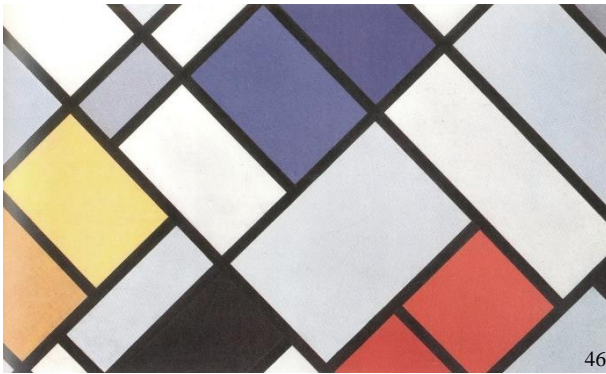
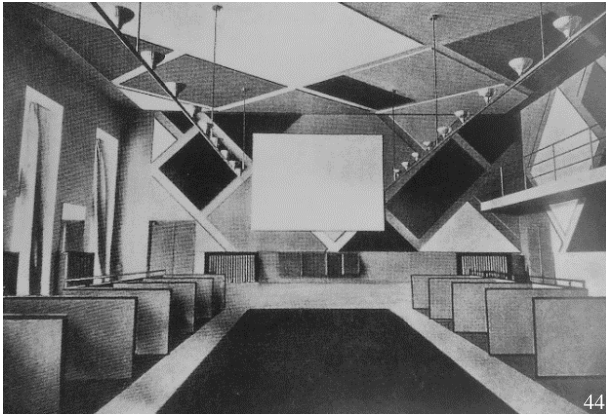


Fig. 44. Theo van Doesburg, Café Aubette, cine-dancing room, 1927.  
 Fig. 45. Theo van Doesburg, Counter Composition V, 1924.  
 Fig. 46. Theo van Doesburg, Counter Composition XVI, 1924  
 Fig. 47. Piet Mondrian, Tableau No. IV; Lozenge Composition c. 1924/1925.  
 Fig. 48. John Hejduk, House A 6 from Project A, 1967  
 Fig. 49. Peter Eisenman, House III, Lakeville, Connecticut, 1969-1971.  
 Fig. 50. John Hejduk, House A 3 from Project A, 1967.

A main condition in the interior or exterior architectural surfaces was the primary role of completion with rectangular geometries of primary colors, in association with white, black and gray that were seen as a whole of architecture and revealed a perfect asymmetric harmony searched by the artists.

*The general aim was not to decorate the modern building with painted murals but to treat it as a sort of abstract sculpture, a 'total-work-of-art', an organism of color, form, and intersecting planes.*<sup>114</sup>

This goal was realized in the Café Aubette, in Strasbourg, France, where an existing 18th-century historical building was *adapted*, its baroque façade was *preserved*, and interior aspect was *altered* with the contrasting De Stijl language. It was a project of van Doesburg conceived between 1926 and 1928, in collaboration with Hans Arp and his wife Sophie Taeuber-Arp (1889-1943). In this design the interiors won a greater pictorial continuity because according to him the principal objective was *to evoke the simultaneous effect of painting and architecture*.<sup>115</sup> In the main room, the cinema-dance hall along the wall of windows, there were placed mirrors that increased and illuminated the space. Also, on the walls and ceiling, Van Doesburg used planes in two shades of red, yellow and grey, even blue, green, white, black inspired *shifted from one surface to the next, asymmetric but balanced by the weight of the color combination*,<sup>116</sup> also looked similar to his painting *Countercomposition XVI* of 1925. These compositions of diagonal grid represented a dynamic principle and a victory over statics that initiated the difference regarding Mondrian's works. Mondrian always kept a perpendicular and straight configuration; however, he just used to rotate the canvas itself, and in this way, he created his own lozenge compositions. For each wall of the foyer-bar and tea room designed by Sophie Tauber-Arp were designed separate geometric compositions that formed a unity of the arts. Only the basement was different from all the other interiors, revealing biomorphic forms in yellow, blue-gray and black, designed by Arp.

*The Aubette is therefore painting- or, more precisely, "being in a painting."*<sup>117</sup>

*Adaptation*  
means to change the capacity, function or performance of a building, and by these processes of modifying is retained the cultural value of the building.

*Preservation*  
is to sustain the existing form, integrity and materials of an historic property.

*Alteration*  
the process of changing function or appearance of a place, in the case of the Café Aubette some interior rooms.

*Restoration*  
after whatever disaster to bring back a building of architectural or historic importance to its original state or appearance, without falsification.

<sup>114</sup> William Curtis, *op.cit.*, p. 152.

<sup>115</sup> Kenneth Frampton, *op.cit.*, p. 148.

<sup>116</sup> Christian Bjone, *op.cit.*, p. 39.

<sup>117</sup> Sergio Polano, *De Stijl/Architecture= Nieuwe Beelding*, in Mildred Friedman (ed.) *op.cit.*, p. 92.

Soon after its completion in 1930, this major work was partially destroyed, and in 2006 was *restored*. In 1951, Philip Johnson in a symposium on the use of the arts in architecture at Museum of Modern Art in New York mentioned Café Aubette as a very successful example of the fine arts used in a building.

The conceptual procedure of the rotation can be observed even earlier in Rietveld's famous red-blue chair of 1918 where he used diagonals as a necessary inclination of the chair or in van der Leek's paintings. Kenneth Frampton called this process "*frontality versus rotation*," and we can appreciate its forward developed in architecture. For instance, the American architect and artist John Hejduk (1929-2000) approached this idea in his *Diamond House*<sup>118</sup> projects from 1962 to 1967, that represent a series of house designs, where through drawings and models he extensively explored formal-spatial possibilities of square plan rotated at forty-five-degree with internal arrangements of orthogonal elements (columns, walls, stairs, furniture, etc.) These conjugations offered new points of view and relations of spatial articulation. For instance, some works from his Project A are just like lozenge-shaped canvases of Mondrian. In the same project, Hejduk also reversed the strategy and within a straight plan he arranged the elements in a diamond configuration, like in Van Doesburg's diagonal wall relief in the Aubette or some other paintings by him.

The similar rotation was engaged by diverse notorious architects. For instance, Eisenman in his project for the House III (1969- 1971) in Lakeville, Connecticut, where the salient features such in interior and exterior consisted of diagonally planes and voids rotated in the same degree, that was interconnected with parallel planes and structural grid, creating a game of elements and a unity of an implicit geometrical code. Frank Lloyd Wright also applied to the rotation for instance in his project of Price Tower (1952-1956) in Oklahoma, around 1960s this likewise was a new design element used by Louis Kahn (1901-1974). In Fisher House (1964-1967) Pennsylvania, he made a house from two cubes, the first one of the public area (living-room, kitchen)

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<sup>118</sup> In 1967, at Architectural League of New York John Hejduk presented an exhibition in collaboration with American painter and architectural theorist Robert Slutzky that explored the relationship between architectonic volume and modern painting, they exposed works about architecture and painting entitled *Diamond in Painting and Architecture*. Slutzky also collaborated with Meier, Eisenman and other architects.

were parallel to the street, and to one of its corners was attached the other cube rotated 45 degrees to the road, this gave more privacy to the sleeping and working area. After the war Doesburg invited other artists like El Lissitzky, the designer Frederik Kiesler, the architect Cornelis van Eesteren (1897-1988) the painter Cesar Domela (1900-1992) or others. Van Doesburg, in partnership with van Eesteren, worked on a project for the main hall of Amsterdam University (1921-1923), where the interior would totally be absorbed by a pictorial approach involving the diagonal strategy; it was never built. Other collaborative projects of these two architects that remind of Mondrian ideal was the counter-constructions of Maison Rosenberg, Maison Particulière and as well the Maison d'Artiste. These colorful models depicted the interacting relation of hovering vertical and horizontal planes and the axonometric drawings of a structure without windows or doors were presented at "The architects of the De Stijl group" exhibition at the Parisian gallery L'Effort Moderne, in 1923.

In 1917, van Doesburg designed a triptych stained-glass window with symmetric and mirroring configurations of patterns for a house in Alkmaar by Jan Wils. He made several artistic contributions to buildings designed by Pieter Oud. For instance, in 1918 he decorated the interiors of De Vonk vacation house at Noordwijkerhout, Netherlands, where van Doesburg painted the doors in a combination of black, gray and white; for the floor mosaic he made an asymmetrical and repetitive pattern with white, black and yellow tiles, which signified according to him *an example of spatial effect in the manner of painting-in-architecture*.<sup>119</sup> Between 1918 and 1920, he created a harmoniously color design for the façade and interiors of Spagen Municipal Housing in Rotterdam that added freedom and looked like *an abstract composition of horizontal and vertical planes in what he called static colors: yellow, green and grey*.<sup>120</sup> According to Pieter Oud, the visual arts and architecture were complementary; this idea is indicated by the course of his collaborations with various artists, but also by his *clear parallels with the painting of Mondrian*.<sup>121</sup>

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<sup>119</sup>Ed Taverne, [et.al.], *J. J. P. Oud*. Rotterdam: NAI Publishers, 2001, p. 143

<sup>120</sup> *Ibid.*, p. 220.

<sup>121</sup> Margarida Brito Alves, *O Espaço na Criação Artística do Século XX: Heterogeneidade, Tridimensionalidade, Performatividade*. Lisboa: Edições Colibri, 2012, p. 206.

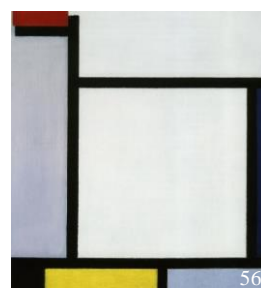
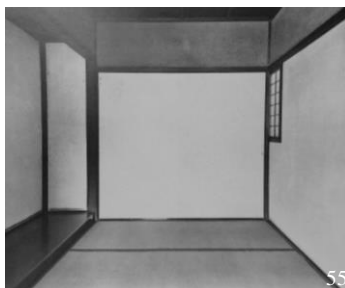
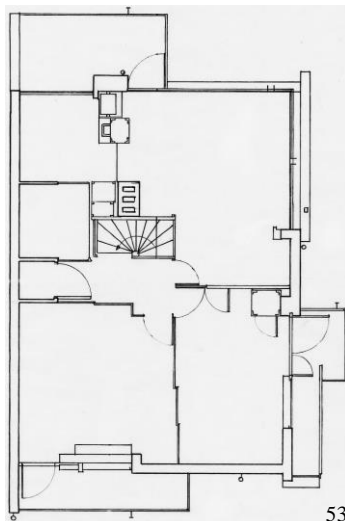
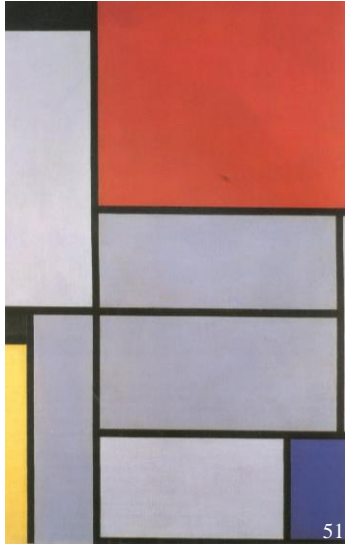


Fig. 51. Tableau I by Mondrian, 1921.

Fig. 52. Café de Unie vintage photograph, Rotterdam, 1925.

Fig. 53. Transformable second floorplan of Rietveld/Schröder house, 1924.

Fig. 54. Rietveld/Schröder house interior 1924. By Rietveld and Schröder-Schräder.

Fig. 55. The Music Room, Katsura Palace, Kyoto. 1620-1658.

Fig. 56. Mondrian's Composition with red, blue, yellow, 1921.

Fig. 57. Piet Mondrian, Composition No. I with Red and Black, 1929.



His design for the façade of Café de Unie in Rotterdam (1925) was intentionally differentiated from the surrounding Neo-classic buildings, the façade built of cement rendering, boards, and glass expressing the usual asymmetry, colors and forms like in some Mondrian's paintings such as *Composition* (1920) or *Tableau I* (1921).

*There are numerous indications that Oud regarded the design of Café de Unie as an experimental moment in his own development as architect-artist.*<sup>122</sup>

During the Second World War in 1940 café was destroyed, but in 1986 the project was reconstructed by Dutch architect Carel Weeber (b. 1937) at another location close to the old one.

The Rietveld/Schröder house (1923-1924) built in Utrecht, in the Netherlands resulted from a collaborative effort of Gerrit Rietveld (1888-1964) and Truus Schröder-Schräder (1889-1985), both members of De Stijl group of artists and architects. The harmony of the building lies in its ingenious grid, corresponding totally to the precepts described in van Doesburg manifesto "Towards a plastic architecture" (1924) as being plastic, functional, economic, anti-cubic, anti-symmetrical, anti-decorative, formless and transformable. The façades consist of geometric planes, painted in shades of grey and white, with some accents of yellow, red and blue; some windows had a simple mechanism that gave possibility of covering them with colored panels and change the façade composition, or uncovering in order to make the interior brighter.

Through experiments with space, in the Rietveld/Schröder interior was achieved a flexible way of living. The upper floor was composed of sliding panels that could freely create various cellular areas, depending on the needs of its inhabitants; also, the broader opening of the corner window could generate a relatively free "flow of space," between interior and exterior and just stairs, bathroom, and the first floor was fixed. *The Schröder house has often been discussed in terms of the relationship between modernist painting and architecture.*<sup>123</sup>

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<sup>122</sup> Ed Taverne, [et.al.], *op.cit.*, p. 342.

<sup>123</sup> Paul Overy, *The cell in the city*, in Eve Blau, Nancy J. Troy (ed.) [et.al.] *op.cit.*, p. 128.

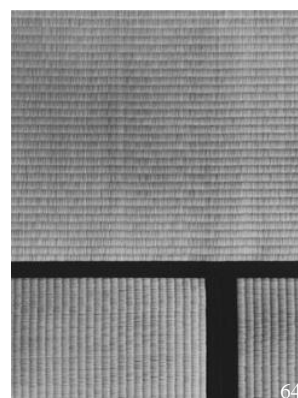
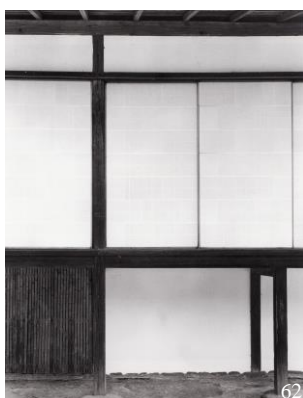
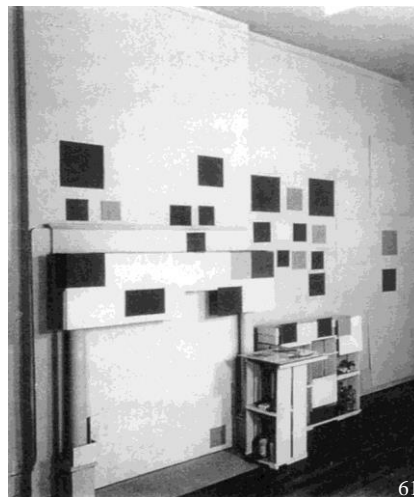
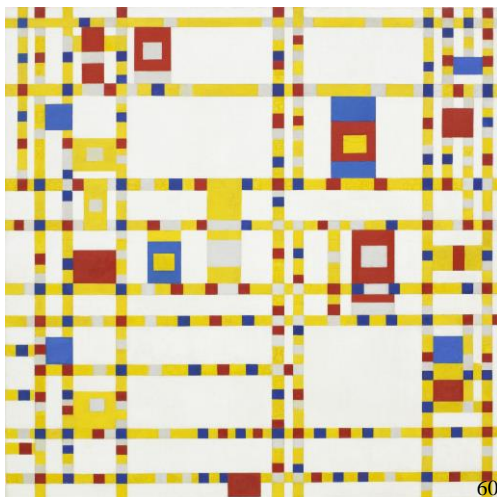
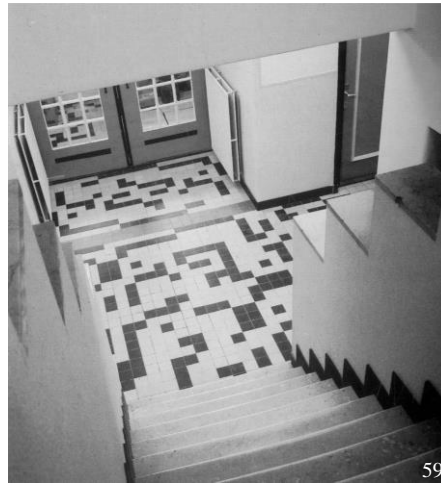
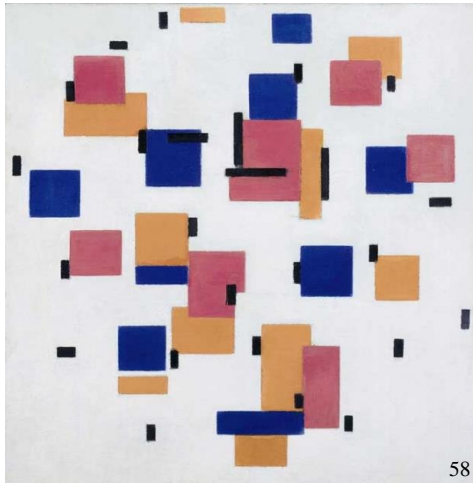


Fig. 58. Mondrian, Composition in Color B, 1917.  
 Fig. 59. De Vonk house, designed floor pattern by Pieter Oud, 1918.  
 Fig. 60. Broadway Boogie-Woogie by Mondrian. 1942- 1943.  
 Fig. 61. Mondrian's studio, New York, 1944.  
 Fig. 62. Katsura Palace, detail façade. Kyoto. 1620-1658.  
 Fig. 63. Katsura Palace, interior with shoji and fusuma.  
 Fig. 64. Katsura Palace, tatami, detail.

And this demonstrates its De Stijl formal concepts, straight lines, rectangular forms, and typical colors on exterior skin, interior limits, even extended on the surfaces of the built-in furniture, all these details represented evident resemblances with Mondrian's language of *a perfect balance between horizontal and vertical, a weightless universe, homogeneous and endless*,<sup>124</sup> that accentuated the personality of the house.

*The Schröder house is thus a total work of art (...) in which painting, sculpture, architecture, and the practical arts are fused.*<sup>125</sup>

Van Doesburg has written several articles between 1912 and 1913 on Asiatic art especially Japanese art, and in Rietveld/Schröder house also can be observed various Japanese influences for instance flexibility, the sliding doors like the Japanese *shoji* or *fusuma*,<sup>126</sup> or beautiful De Stijl patterns similar to rectilinear modules of various size and dimension on the floors named *tatami mats*<sup>127</sup> or on the walls that represent a distinguishing characteristic organization of space and in aesthetic of traditional Japanese architecture; moreover the art and architecture historian Paul Overy (1940-2008) observed the same parallels in Mondrian's paintings stating that:

*The balance asymetry and contemplative silence of Mondrian's later paintings are in extraordinary sympathy with Japanese interiors.*<sup>128</sup>

An example where we can observe these affinities is between the Katsura Palace build from 1620 to 1658, especially The Music Room and Mondrian's painting Composition with red, blue, yellow (1921). Besides paintings, around 1931 Mondrian transformed his studio from Paris into a work of art on the surrounding walls; he attached movable grids of primary colors of different sizes just like he used in his works. After moving to London in 1938, he used the same technique into his small studio on Parkhill Road.

With the increasing escalate of the war, in 1940, he moved to New York

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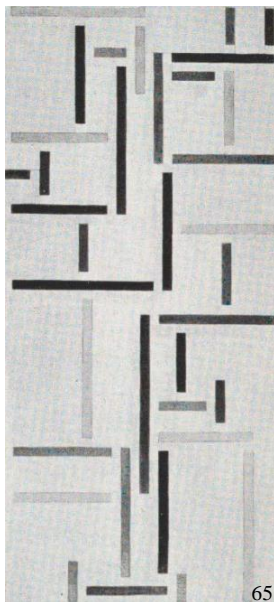
<sup>124</sup> Rudolf Arnheim, *The Power of the Center*. Berkley, London: University of California Press, 1988, p. 105.

<sup>125</sup> William Curtis, *op.cit.*, p. 159.

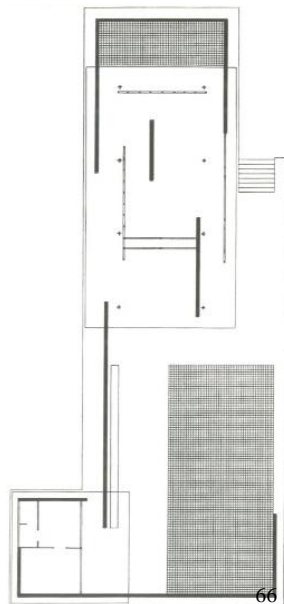
<sup>126</sup> In Japanese culture *shoji* is the name for the traditional sliding and removal door or walls made of translucent paper over a framework of wood, and *fusuma* is the sliding door covered with opaque paper.

<sup>127</sup> Rectangular and thick mats of standard sizes based on human body used as soft flooring material, and an absolute number of mats determine the room size and shape that are either rectangular or square.

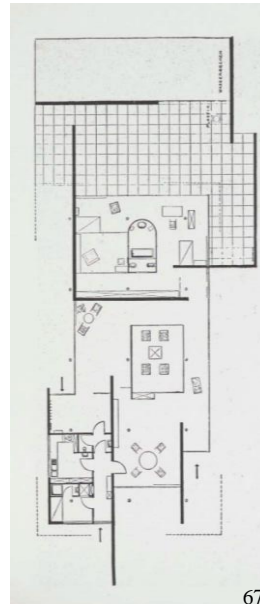
<sup>128</sup> Paul Overy, *op.cit.*, p.28.



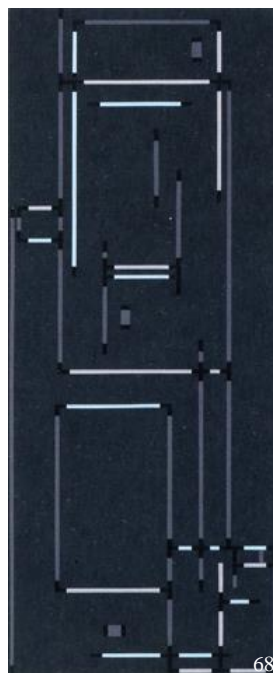
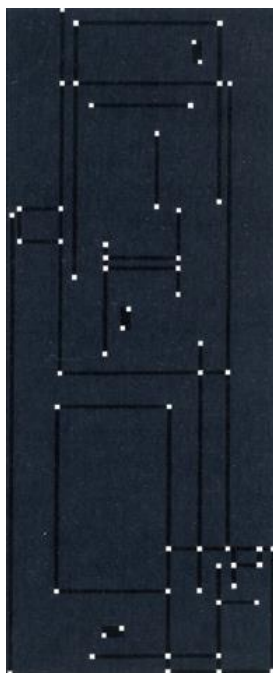
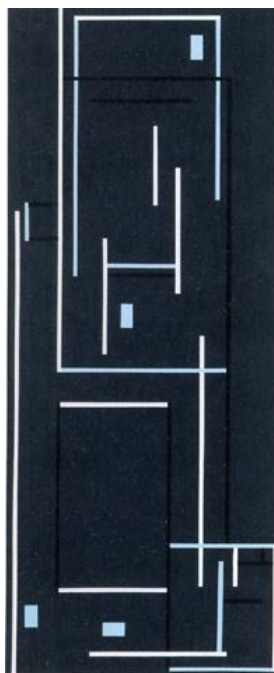
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Fig. 65. Rhythms of a Russian dance by Theo van Doesburg, 1918.

Fig. 66. Barcelona Pavilion, Mies van der Rohe, 1929.

Fig. 67. House in the Berlin Building Exposition, 1931.

Fig. 68. Painting Mies van der Rohe-Projekt, Barcelona, by Rita Ernst, 2010.

and continued this practice into his new studio; his friend the painter Willem de Kooning having visited it, said that it was “*like walking around inside one of Mondrian’s paintings.*”<sup>129</sup> This “in space collage” method was also an experimental ground to reflect on principles, harmony, and composition that he sought to accomplish in his works, and helped him to conceive a series of canvases such as *New York 1*, *Broadway Boogie-Woogie* and *Victory Boogie-Woogie* that reflect illusory depth. In his essay, *Plastic art and pure plastic art* (1937), Mondrian wrote that in the future art would no longer be a thing separated from the surrounding environment, where he accentuated:

*“by the unification of architecture, sculpture and painting, a new plastic reality will be created, (...) and will aid the creation of an atmosphere not merely utilitarian or rational but also pure and complete in its beauty.”*<sup>130</sup>

Neoplasticism had a considerable influence on the development of modern architecture and on architects as Le Corbusier, Walter Gropius, Frank Lloyd Wright or Ludwig Mies van der Rohe (1886-1969). In his works, Le Corbusier used precepts of functionalism and purity. Wright *took the spatial conception of the Dutch avant-garde*,<sup>131</sup> transmitting in his early works, like overlapping wall planes, long and flat roofs or a variety of spatial relationships, and he switched the representative Neoplasticism colors with the expressivity of natural materials. We can observe these characteristics in his Malcolm Willey House or in Falling Water House, “neoplastic colors” he would apply just in some stained glass designed by him in several works for instance in the Conley children’s playhouse in Riverside, Illinois (1912). Like De Stijl assimilated Japanese visions, in Wright’s works were also confirmed several formal similarities that *were embodied in traditional Japanese art and architecture.*<sup>132</sup>

Van der Rohe abolished traditional typologies, his floorplans were quite simple, mainly centered on planes and lines giving the impression of an abstract and endless spatial composition. Alfred Barr observed that his project drawings for the Brick Country House in Potsdam, Germany (1924) were

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<sup>129</sup> Willem De Kooning, apud Jonathan Feinstein, *The Nature of Creative Development*. Stratford: Stratford University Press, 2006, p. 261.

<sup>130</sup> J. L. Martin, Ben Nicholson, N. Gabo, *Circle: International survey of constructive art*. New York, Washington: Praeger Publishers, 1971, p.56.

<sup>131</sup> Kenneth Frampton, *op.cit.*, in Mildred Friedman (ed.), *op.cit.*, p. 113.

<sup>132</sup> Kevin Nute, *Frank Lloyd Wright and Japan: The role of traditional Japanese art and architecture in the work of Frank Lloyd Wright*. London, New York: Routledge, 2000, p.5.

patently inspired by a painting of 1917 of Van Doesburg *“Rhythms of a Russian dance,”* (fig. 65) composed of perpendicular walls that don't close the spaces and permit fluidity; it wasn't built but in many ways was the forerunner for his later projects, like Barcelona Pavilion of 1929, the Tugendhat house at Brno of 1930, with a simplified sequence of spaces and walls dissolved in the glass, the Berlin building exhibition of 1931, or group of three courthouses (1938), *in all these works a horizontal centrifugal spatial arrangement was subdivided and articulated by free-standing plans and columns,*<sup>133</sup> encompassing essential concepts of De Stijl paintings: horizontal and vertical lines, precisely rectangular forms, asymmetry. In his creative imagination, Mies Van der Rohe also rejected primary colors and instead concentrated on the monochromatic idea and the natural colors of materials. Again, mentioning the Barcelona Pavilion and the use of various shades of polished stone like green marble for the walls around the pool, like Roman travertine or golden onyx in the hall, and gray etched or bottle-green and even black glass, with a white painted roof, his concept definitely can make us revise his definition of decoration.<sup>134</sup> In collaboration with the modernist designer Lilly Reich (1885-1947), *they nonetheless introduced into the orthogonal concept the idea of a layered and varied transparency,*<sup>135</sup> applied mainly in the interiors as a composition of the opaque, translucent and transparent interior walls. This iconic building over the years were inspiration for architects and artists that created works based on its concept, and even some of them were invited to make temporary art instalations. Rita Ernst (b. 1956) a Swiss artist translated the architectural elements of pavilion (fig. 68), and other Rohe's constructions into her series of abstract canvases entitled “Imagination Mies”.

The year of 2017 marks the 100th anniversary of De Stijl and in the public buildings, and parks of city of the Hague, were metamorphosed with diverse works in De Stijl language, to celebrate this event. The city hall building designed (1986-1995) by architect Richard Meier (b. 1934) in a minimalist style, with a white exterior, like a canvas open to artistic interpretations provided the perfect ground for its reinvention with a Mondrian grid, that was designed by artists Madje Vollaers and Pascal Zwart.

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<sup>133</sup> Kenneth Frampton, *op.cit.*, p. 164.

<sup>134</sup> Maria Salgado Ai Quintas, *op.cit.*, p. 299.

<sup>135</sup> Kenneth Frampton, *op.cit.*, in Mildred Friedman (ed.), *op.cit.*, p. 109.

## RUSSIAN AVANT-GARDE

It was after the October Revolution of 1917 that architecture and arts in Russia were absorbed by new rising tendencies of abstract and pure forms, being distanced from rationalism traditions and the taste of 19th-century bourgeois culture. The artists supported the revolutionary reality of that time because they saw it as an opportunity to give to the art a politico-ideological and social content and simultaneously establish a contact with daily existence, introducing the role of art to provoke a social change and respond to the demands of the new collective and communal society. Russian art historian Selim Khan-Magomedov (1928-2011) pointed out about the influent interaction between art and architecture in post-Revolutionary period stating:

*An important feature of the evolution of Soviet architecture was (...) the output of painters, who sensed vast new aesthetic opportunities and the basis for a new style in simple geometric shapes devoid of decorative effects.*<sup>136</sup>

He mentioned Malevich, an artist whose artworks *indirectly influenced the development of formal architectural innovations, especially those involving objective visual criteria.*<sup>137</sup> Russian art and architectural historian Anatolii Strigalev (1924-2015) as well shared this idea and affirmed that the paintings dating from the 1910's of Russian artists like Lyubov Popova (1889-1924), Malevich, Natalia Goncharova (1881-1962), and others were “a source of certain concrete formal motifs”<sup>138</sup> that served as a “textbook on a new spatial vision and the aesthetics of rupture and dislocation.”<sup>139</sup>

From the beginning of the 20<sup>th</sup> century, Russian Avant-Garde first conquered painting and sculpture, then architecture. The main movements were *Rayonism*, initiated in 1913 by Mikhail Fyodorovich Larionov (1881-1964) and Natalia Goncharova, as some sort of synthesis of Futurism and

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<sup>136</sup> Selim Omarovich Khan-Magomedov; Catherine Cooke (ed.), *Pioneers of Soviet Architecture: The search for New Solutions in the 1920s and 1930s*. trans. Alexander Lieven, New York: Rizzoli, 1987, p. 61.

<sup>137</sup> *Ibid.*, p. 63.

<sup>138</sup> Anatolii Strigalev apud Philip Jodidio, *op.cit.*, p. 23.

<sup>139</sup> *Ibid.*

Cubism; in the same year, with a total abstraction, simplification and non-objective representation, were defined *Suprematism* by Kazimir Malevich. Suprematist works contained pure colors and pure geometric forms like a square, rectangle circle, cross, triangle or lines, that also attempted to display weight and movement; the first artistic constructions were exposed in 1915 at a collective exhibition called *0.10 The last Futurist exhibition* in St. Petersburg. Suprematism also arrived at a point when rejected color and compositions contained just a combination of black and white, for example, Malevich's famous painting *Black Square* (1915). The next step in this trend engaged volumes and *pointed the way to Suprematist architecture (...) a field to which Lissitzky made an important contribution*,<sup>140</sup> but also Malevich himself created three-dimensional architectural compositions of different rectangular shapes and sizes fixed between them, known as *Architectons* (1920). In architecture *Constructivism*, that had similar programs and aspirations as the Bauhaus, was evidenced, along with a wide variety of theoretical reflections as writings, manifestoes, proclamations, and books.

*In Russia, as in Europe at that time, the new art was the most obvious and direct in shaping the theories and aesthetics of architectural avant-garde.*<sup>141</sup>

Soviet architects that represented the idea of artistic renewal and radical aesthetics, based on purely abstract forms, just as paintings principles, were Ivan Leonidov (1902-1959), Konstantin Melnikov (1890-1974) Alexander Rodchenko (1891-1956) that referred to it as the “*art of the future*”<sup>142</sup> and Vladimir Tatlin (1885-1953), that was the founder of Constructivism in 1913, and described it like *not the old not the new: but the necessary*.<sup>143</sup>

Also, this Russian phenomenon gained international authority with the help of the suprematist El Lissitzky (1890-1941) who in 1921 moved to Berlin and started to extend its borders. He travelled a lot to various European destinations, interacted with many artists and architects such as Theo van

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<sup>140</sup> Selim Omarovich Khan-Magomedov, *op.cit.*, p. 63.

<sup>141</sup> Catherine Cooke, *Russian Avant-Garde: Theories of Art, Architecture and the city*. London: Academy Editions, 1995, p. 26.

<sup>142</sup> Harry Francis Mallgrave *op.cit.*, p. 239.

<sup>143</sup> Vladimir Tatlin apud Luis Fernández-Galiano, *Lo necesario: Aprendiendo de los constructivistas*, in José León Vela, *El constructivismo hoy*. Sevilla: Universidade de Sevilla, 1992, p. 215.



Doesburg, Moholy-Nagy (1895-1946), Arp, Mies van der Rohe, Kurt Schwitters and others. He presented them to different art circles and their ideas through various exhibition projects and lectures and, in the spring of 1924, in Zürich it was established the ABC, which became an essential architectural constructivist group outside the URSS, with works in Germany, Holland, Mexico, among other countries. *Lissitzky's ultimate goal was to unite architects and artists of many nationalities under the banner of (...) constructivism*<sup>144</sup> he also had made clear that it was an *ecumenical movement that encompassed painting, sculpture, and other branches of the arts*.<sup>145</sup>

Inspired by Malevich in his search for an own form of art El Lissitzky created the *Proun* (1919-1927) intended as the project for the affirmation of the new in art that interchanged and *explored the common ground between architecture, painting and sculpture*.<sup>146</sup> According to him, these were economic and axonometric constructions where he tried to reduce content to a set of basic colored and equilibrated elements with proprieties of volume, opacity, and transparency.<sup>147</sup> In his conception, these compositions signified a *transfer station from painting to architecture*.<sup>148</sup>

In 1923, based on Proun paintings El Lissitzky performed the *Proun Room* a spatial intervention for the Grosse Berliner Kunstausstellung. At this Great Art exhibition in Berlin, he used the three-dimensional space (floor, four, walls and ceiling) as an essential component for his creation, on each wall of the interior he extended interrelated static and dynamic paintings (without frame) and sculptures of elementary geometric forms attached in different directions, and this composition was perceived as a totality with the room and embodied the idea of the *Gesamtkunstwerk*. Here the spectator was able to perceive the space differently from the usual viewing of a painting or a sculpture; he was involved in the continuous movement of the paintings, from one plan to another. Proun Room was reconstructed in 1965 and again in 1971, forming a collection of the Van Abbemuseum in Netherlands. Lissitzky's following

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<sup>144</sup> Sima Ingberman, *ABC: International Constructivist Architecture, 1922-1939*. Cambridge, London: The Mit Press, 1994, p. 7.

<sup>145</sup> *Ibid.*, p. 80.

<sup>146</sup> Alan Colquhoun, *op. cit.*, p. 123.

<sup>147</sup> Victor Morgolin, *The Struggle for Utopia: Rodchenko, Lissitzky, Moholy-Nagy, 1917-1946*. Chicago, London: The university of Chicago press, 1997, p. 32-33.

<sup>148</sup> El Lissitzky, *The film of El's Life up to 1926*, in Selim Omarovich Khan-Magomedov, *op.cit.*, p. 560.

exhibition rooms involved a radical representation in comparison with the Proun Room, but maintained *the notion of art combined with architecture*.<sup>149</sup> These were at Dresden, *Room for Constructivist Art* (1926) and at Hanover *The Abstract Gallery* (1927-1928) that was a modular and changeable space, where the visitors could simultaneously interact with artworks and space, whereby switching panels were able to see art and create different space visions of the exhibition.

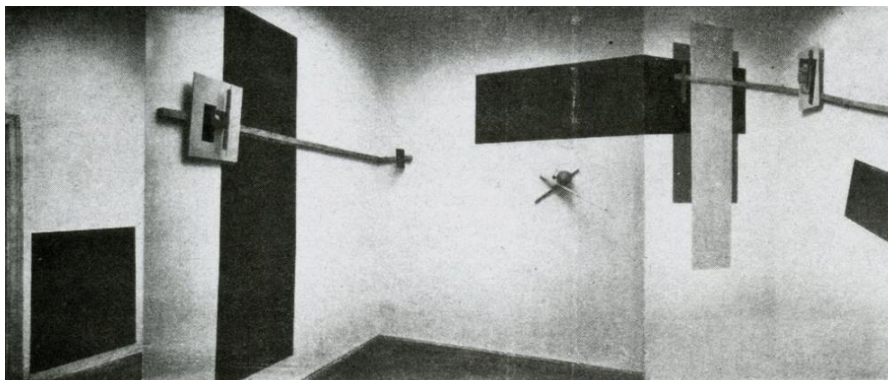


Fig. 69. Proun Room, by El Lissitzky 1923.

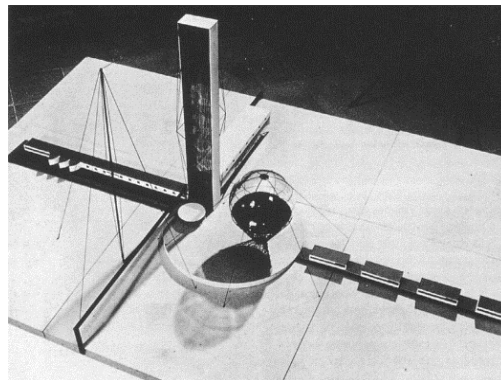
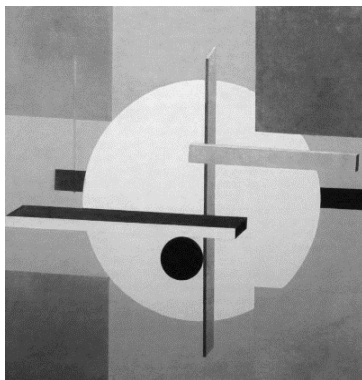


Fig. 70. Proun R. V. N. 2. Lissitzky 1923. Fig. 71. Model for the Lenin Institute, 1927.

The architect Ivan Leonidov (1902-1959) in various works also was influenced by Malevich. For instance in the project for the Lenin Institute (1927), a collective center for knowledge in Moscow, it was composed of two basic forms, a transparent and rectangular tower serving as a book stack and a glass sphere as an auditorium, both stabilized by wires and settled on a round urban podium, also were more five research units and a horizontal library, all

<sup>149</sup> Gabriela Raposo, *Endogenous Spatiality in Architecture and Art: Blurred Boundaries since the First Artistic and Architectonic Vanguards of the 20th Century to Contemporaneity*. Athens: ATINER'S Conference Paper Series, No: ARC2014-1183, 2014, p. 11.

aggregation corresponded to suprematist compositions about *the primacy of volumetric masses and their spatial solution in consideration of weight, speed and direction of movement*,<sup>150</sup> and approximating to Lissitzky principle of a “gravity-free architecture.”<sup>151</sup>

Future generations of architects also took inspiration from suprematist artworks. For instance, we can see this correlation in projects of Zaha Hadid (1950-2016), starting in 1976, with her thesis project in which projected a bridge over the Thames opted for a novel approach, she took a painting by Malevich *Architekton* (1920) and turned it into architecture. At that time in Moscow were founded two educational institutions that both incorporated art, architecture, and design in their course programs developing the Constructivist ideas and ambitious proposals, one was *Vkhutemas* abbreviation for the Higher State Artistic and Technical Studios, founded in 1920. This school was composed by two opposed parts, one based on rationalism under the leadership of Nikolai Ladovsky (1881-1941) and the Constructivism with Varvara Stepanova (1894-1958), Rodchenko, Alexei Gan (1889-1940) and other members. For example, Moisei Ginzburg (1892-1946) in his teaching course about architectural composition, suggested visual arts as a factor in the resolution of architectural problems.<sup>152</sup> The other school was *Inkhuk*, organized in the same year under the direction of Kandinsky.

Also, were created organizations that featured the co-relation between different disciplines. *Sinskulptarkh* (1919-1920) also known as *IZO* was the Commission for the resolution of questions bearing on synthesis of sculpture and architecture; a year later after its release, the group was also joined by painters, such as Rodchenko, Stepanova and Alexander Shevchenko (1883-1948) and, with the addition of paintings, the group was named *Zhivskulptarkh* and they *set itself the ultimate aim of synthesis all spatial arts- painting, sculpture and architecture*,<sup>153</sup> *Unovis* (1919-1922) was the affirmation of the new art, here was evidenced Suprematism and the collaboration between architects and painters as for instance the one of Malevich with Lissitzky.

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<sup>150</sup> Alexei Gan, *Notes on Kazimir Malevich*, 1927, in Catherine Cooke, *op. cit.*, p. 159.

<sup>151</sup> Kenneth Frampton, Yukio Futagawa, *Modern Architecture 1920-1945. GA Document, Special Issue 3*. Tokyo: A. D. A. Edita, 1989, p. 315.

<sup>152</sup> Moisei Ginzburg, *Course program: Theory of Architectural Composition*, 1926, in Catherine Cooke, *op. cit.*, p. 182.

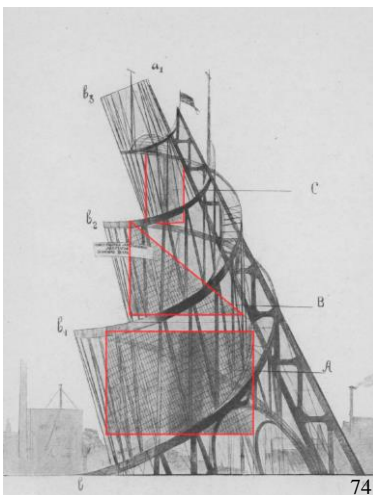
<sup>153</sup> Selim Omarovich Khan-Magomedov, *op.cit.*, p. 67.



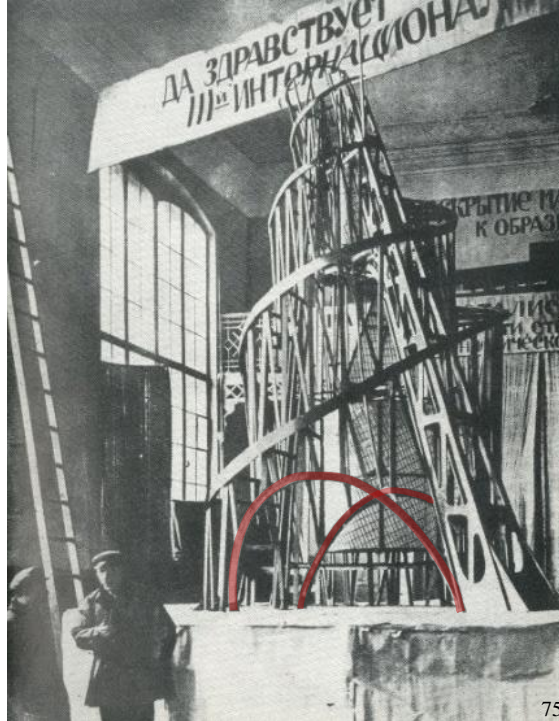
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Fig. 72. Raymond Duchamp-Villon, Torso of a young man, 1910.  
 Fig. 73. Umberto Boccioni, Unique forms of continuity in space, 1913.  
 Fig. 74. Drawing of Tatlin's Tower.  
 Fig. 75. Model of Tatlin's Tower, 1920.  
 Fig. 76. Soviet Pavilion, by Konstantin Melnikov, 1925.

The most symbolic and grandiose work representing Constructivism was the Vladimir Tatlin's *Monument to the Third International* (1919-1920), that was never built in the predicted full-scale, but resulted in various iron or wood frame models. For the design conception of the first original model, Tatlin collaborated with the sculptor Tevel Shapiro (1898-1983) and painters Iosif Meerzon (1900-1941) and Pavel Vinogradov (date unknown), in 1919 Tatlin described it as *a unity of architecture, painting, and sculpture*.<sup>154</sup> A year later, the art historian and critic Nicolay Punin (1888-1953) wrote about it:

*The main idea of the monument was formed on the basis of organic synthesis of architectural, sculptural and pictorial principles and was intended to give a new type of monumental structure, uniting in itself a purely creative form with a utilitarian form.*<sup>155</sup>

The model was exposed in 1920 in Petrograd, at the third anniversary of the October Revolution and in Moscow, at the Eighth Congress of Soviets. Its symbolical concept was about an inclined and asymmetrical structure some 400 meter high composed by three large units of elementary forms, one above the other, at the base was the cube, then an irregular pyramid and a cylinder on the top, each one revolving at different speeds, surrounded by a culminant point that had two interlocked and ascending spirals, suffused with vertical and oblique slats, thus representing the movement of freedom. All elements formed a dynamic and expressive tower of steel and double glass serving for cultural and political programs. American architect and author John Milner observed that the tower, besides its lack of façades had a front, sides, and back and he associated it with a figure, where its elements such as diagonal and spiral with its inherent movement or the two arches on both sides were *recalling the ancient sculptural tradition of the striding revived by Rodin and more recently by Umberto Boccioni*,<sup>156</sup> for instance, Boccioni's abstract and dynamic sculpture called "Unique forms of continuity in space" (1912-1913). This idea of movement that involves the whole body of architecture was compared by

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<sup>154</sup> Vladimir Tatlin apud Norbert Lynton, *Tatlin's Tower: Monument to Revolution*. New Haven, London: Yale University Press, 2009, p. 78.

<sup>155</sup> Николай Пунин, *Памятник III интернационала*. Петербург: Издание Отдела Изобразительных Искусств, Н. К. П. 1920, p. 1.

<sup>156</sup> John Milner, *Vladimir Tatlin and the Russian Avant-Garde*. 2<sup>a</sup> ed. New Heaven, London: Yale University Press, 1984, p. 155.

Giedion with the *Sant' Ivo church* by Francesco Borromini that included an entire movement culminating with a spiral that absorbs the cupola.

Tatlin aspired at combining art and architecture. Instead of the usual use of painting or sculpture, in his manifesto "*The work ahead of us*" (1920), he proposed a method of combination between material, volume and construction that resulted in a new artistic and expressive form. He accomplished this in various projects like his earlier explorations of space *Selection of Materials* (1914) or series of *Corner Counter Reliefs* (1914-1915) that created a new type of interior space and were inspired by *reproductions (...) of Picasso Still Life with Guitar and Bottle*<sup>157</sup> which he had seen in 1913; but also, in the Monument to the Third International or in his project *Letalin* developed from 1929 to 1932. Starting in 1922 there were launched various competitions, but just some of them were realized, in the case of Melnikov that, in 1924, won three contests which were all of them built. One of them, representing the apogee of his work, was the *Soviet Pavilion*, created in 1925 in Paris, for the International Exhibition of Decorative Arts. The building structure was made of wood and steel with huge windows with white frames because he wanted it *to be as full of light and air as possible*,<sup>158</sup> and everyone who walked around the building could easily see the interior. Predominantly, it was colored in gray, with red accents, thus evoking the political ideal. The architectural composition of a deformed geometry was crossed by a diagonal staircase that also divided the building into two symmetrical parts. Above this route there was a roof constituted of intersecting planes which also painted in red. The idea of the pavilion had much success being awarded the Grand Prix. Difficulties after the post-revolution period did not allow the realization of many constructivist projects and Russian Avant-Garde movements had more significant achievements in painting, sculpture, and theater. At the end of 1930, Russian Avant-Garde architecture lost its status for the Stalinist authority transformed arts into elements of propaganda. In 1932, the new regime removed all the autonomous groups of architects. Although most constructivist projects were not implemented, their conceptual ideas exerted a meaningful influence on the subsequent decades of architecture and art.

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<sup>157</sup> Norbert Lynton, *op.cit.*, p. 35.

<sup>158</sup> Konstantin Melnikov apud Catherine Cooke, *op.cit.*, p. 143

## BAUHAUS

*My idea was always we have to do something together, we have to pull the whole thing together, we have to destroy the separations between painting and sculpture and architecture and design and so on, its all one.*<sup>159</sup>

In 1919, Walter Gropius was solicited to lead the Academy of Van de Velde dedicated to the applied arts, unifying it with the college of fine arts in Weimar. As a result, and in the same year, he founded the school *Staatliche Bauhaus* with a new program that proposed to bring together all creative practices into one whole, reunifying all artistic domains like the fine arts, the handicrafts, the crafts in general and design *as inseparable components of a new architecture*.<sup>160</sup> To achieve this, Gropius emphasized the connection between architects, artists, and craftspeople. New curriculum overflowed the institutional framework of a school and became an international cultural and artistic movement; its idea tended towards the same direction as the climate of Expressionist architectural experiment and the earlier Arts and Crafts, with their concept of *Gesamtkunstwerk*. László Moholy-Nagy, one of Bauhaus teachers, searching for the total combination of the disciplines, explained this idea *as an attempt to bring together into one entity singular works or separate fields of creation that were isolated from one another*.<sup>161</sup> As a result, many architects and artists of that period employed in their works new ideas that are clearly described in the manifest of Bauhaus written by Gropius in April 1919.

*“The ultimate aim of all visual arts is the complete building! To embellish buildings was once the noblest function of the fine arts; they were the indispensable components of great architecture. Today the arts exist in isolation, from which they can be rescued only through the conscious, cooperative effort of all craftsmen. (...) Architects, painters, and sculptors must recognize anew and learn to grasp the composite character of a building both as an entity and in its separate parts. Together let us desire,*

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<sup>159</sup> Walter Gropius, *On the origin of the Bauhaus*, in *Bauhaus Reviewed 1919-1933*. Norfolk: LTM Recordings, 2007, CD-ROM, 2472.

<sup>160</sup> Hans Wingler, *The Bauhaus*. Cambridge; London: The MIT Press, 1978, p. 32.

<sup>161</sup> László Moholy-Nagy, *Painting Photography Film*. trans. Janet Seligman, Cambridge, Massachusetts: The Mit Press, 1967, p. 17.



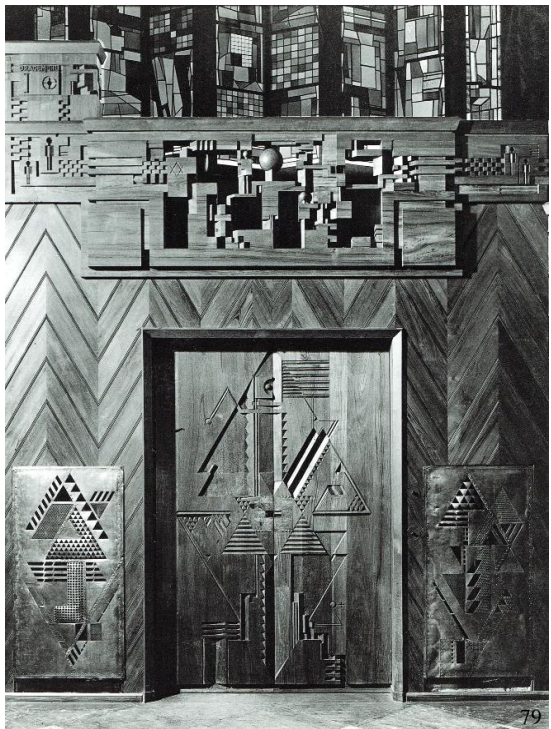
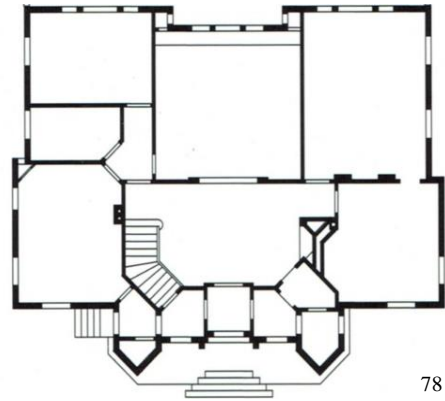
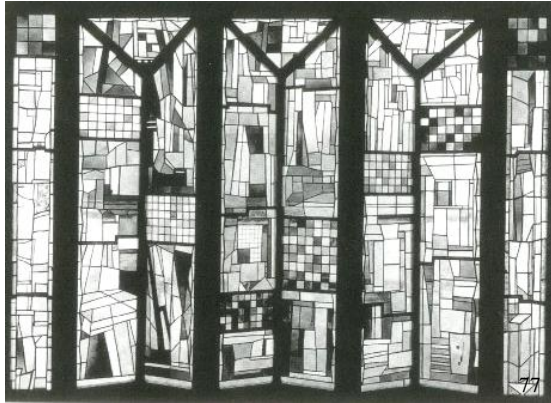


Fig. 77. Sommerfeld house stained glass by Josef Albers, 1920-1921.

Fig. 78. Sommerfeld floor plan, by Gropius and Meyer.

Fig. 79. Sommerfeld main entrance (interior view).

Fig. 80. Sommerfeld vertical access.



*and create the new structure of the future, which will embrace architecture and sculpture and painting in one unity (...)”*<sup>162</sup>

The Bauhaus School had three periods, starting in the city of Weimar, then reached its artistic apogee in Dessau, and finally moved to Berlin. The first phase was led by Gropius, from 1919 till 1928, succeeded by Hannes Meyer (1889-1954) till 1930, and the last one was directed by Mies van der Rohe, until its closing in 1933 as a direct consequence of the rising of the Nazi regime. The Bauhaus was always a dynamic center of arts education, with an impact on architecture, design, and visual arts, with the intention of unifying the arts with industrial production, and the partnership between artists and architects was vastly expressed in their projects. Following the Expressionist aesthetics, the Sommerfeld House (1920-1921) for an exhibition in Berlin, was a wood construction set on a limestone base. It was built in a teamwork environment, by Gropius with Adolf Meyer (1881-1929) and students from the Bauhaus that were encouraged to work on different areas, in order to gain practical experience. The house incorporated various artistic treatments, whereas Alberts designed the colored glass windows that filled the bay over the front door, Marcel Breuer developed some of the furnishings, Dörte Helm executed the curtain with applications, the walls were decorated by the atelier of murals, the metallic elements were manufactured by Hans Jucher and, finally, Joost Schmidt was responsible for the wood carvings of the front door and for the staircase that contained five panels with *small puppet-like figures and carved Masonic symbols*.<sup>163</sup> As for Gropius, being the idea of a total work of art a pursuit of many years, the Sommerfeld House was an opportunity to achieve, it *signified a step in the union of all the arts in building*.<sup>164</sup>

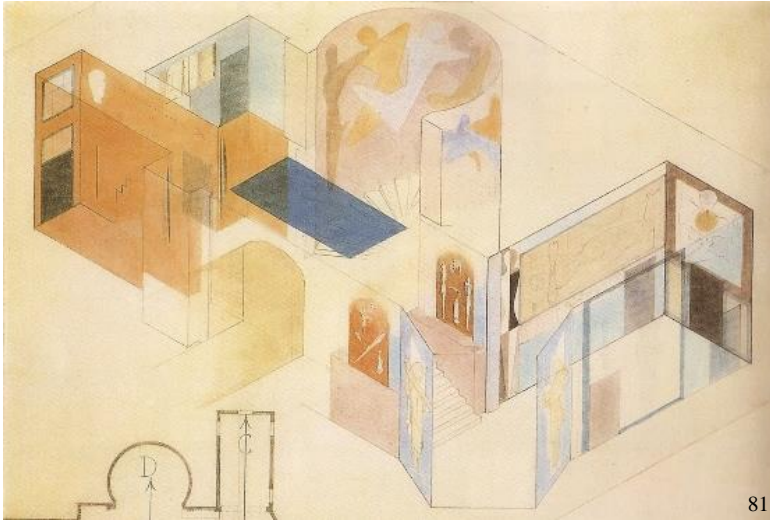
In 1923, under the supervision of the teacher of the first painting studio Oskar Schlemmer (1888-1943), the students were again involved in real work, this time in the redecoration of hall and stairwell murals in ateliers building of Bauhaus school from Weimar, designed by van de Velde. This remodeling was a unique project conceived for the first Bauhaus exhibition, with ballet performances that were in curriculum, also conferences, music and movie.

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<sup>162</sup> Hans Wingler, *op.cit.*, p. 31.

<sup>163</sup> Christian Bjone, *op.cit.*, p. 26.

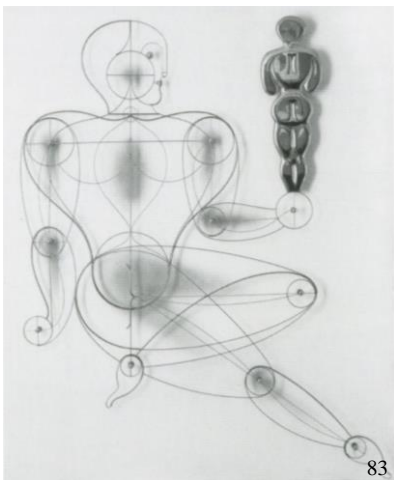
<sup>164</sup> Jacinto Rodrigues, *A Bauhaus e o Ensino Artístico*. Lisboa: Editorial Presença, 1989, p. 63.



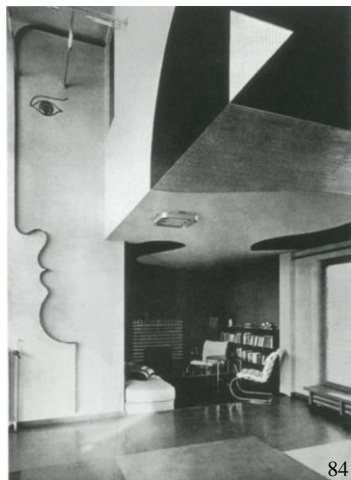
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Fig. 81. Oskar Schlemmer's design for mural and at Bauhaus, 1923.

Fig. 82. Schlemmer's sculptures, Bauhaus, 1923.

Fig. 83. Schlemmer's Rabe house, wire figure Homo with black figure on its hand, 1931.

Fig. 84. Schlemmer's Rabe house, wall mural, 1931.

Here, again, was demonstrated the idea of the unity of all the arts in architecture combining with paintings by Schlemmer, reliefs in mortar by Joost Schmidt (1893-1948). All were about the figurative theme in simple forms, with a vast palette of primary colors, with some accents of black, white and metallic colors like copper, gold, silver, blue and violet silver, all articulated into a great harmony. However, how this work and some others demonstrate, an essential particularity of the Bauhaus was that most of the visual arts were developed as individual components before they could be assembled into the new construction. In 1930, the artist Schlemmer collaborated with architect Adolf Rading (1888-1957) for the project of the *Rabe House*. He designed paintings that engaged all in three-dimensional space and changed the perception of the exact line of the room's edges. Also, there were wire sculptures, all in different scales, that also distorted the perceived interior.

*His wall designs expand the existing architecture to demonstrate other ways of viewing and experiencing space.*<sup>165</sup>

Later in 1950, the *Harkness Commons* building at the University of Harvard in Cambridge, by the Gropius atelier "The Architects Collaborative" in the United States, represents an excellent reference of various expressive dialogues in the context of an educational environment. Here again participated different artists at the creation of the building, such as the sculptor Richard Lippold (1915-2002) that contributed with a high abstract stainless steel sculpture, named *World Tree* at the entrance, artist and architect Herbert Bayer (1900-1985) executed a tile mural of the main ramp and a mural for one of the dining rooms named *Verdure*, was the abstract painting is formed by windows and columns just like usual painting shown in a frame. Joan Miró (1893-1983) created murals in Barcelona for another dining room. Also, here and along two dividing walls, Hans Arp made a set of cut wood reliefs *Constellation* and, in the lounge, Josef Albers (1888-1976) produced *America*, a brick relief sculpture with a fireplace on the opposite side; its stark vertical composition suggested the shapes of growing skyscrapers. The Harkness Commons project represent an extensive example of collaboration between modern art and architecture in America.<sup>166</sup>

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<sup>165</sup> Marcia Feuerstein, Gray Read, *Architecture as Performing Art*. New York: Routledge, 2016, p. 181.

<sup>166</sup> Christian Bjone, *op.cit.*, p. 30- 34.

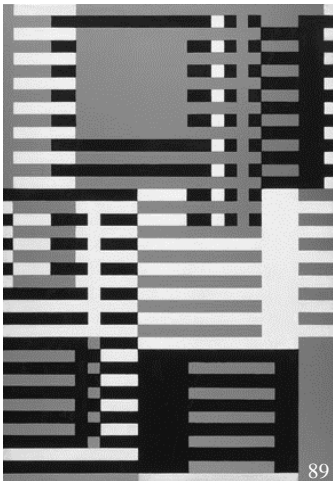
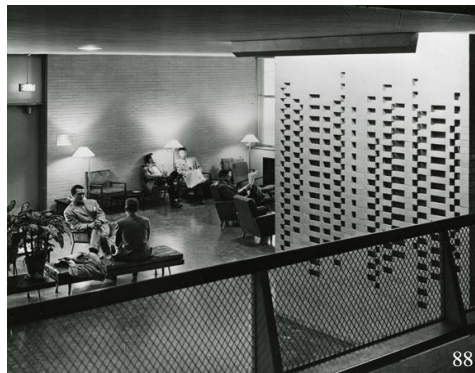
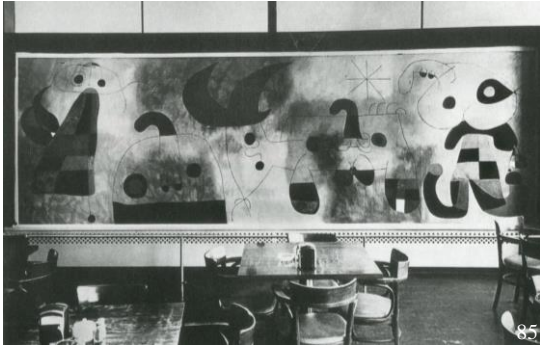


Fig. 85. Mural Barcelona at Harkness Commons, Harvard University by Joan Miró, 1950.  
 Fig. 86. Herbert Bayer, tile mural, Harkness Commons, 1950.  
 Fig. 87. Hans Arp, wood relief Constellation. Harkness Commons, 1950.  
 Fig. 88. Josef Albers, brick chimney America, Harkness Commons, 1950.  
 Fig. 89. Painted glass, Upward by Josef Albers ca. 1926.  
 Fig. 90. Mural Manhattan, by Josef Albers, at Pan Am Building, New York. 1963.

All the referred examples are evidence of the main idea that the masters from the Bauhaus School intensively developed.

*Fernand Legér told: It is about the resurrection of the collaboration between the three arts: architecture painting and sculpture, working in the team with objectives, more or less social.*<sup>167</sup>

In that epoch, modern art was variously extended into the American architectural context, especially in the lobby walls and entrances of public and civic buildings. For instance, Josef Albers had the opportunity of transporting his artistic language, composed of rigorous and precise compositions of primary geometries, often with a perspective effect, in various buildings into big atriums and halls or even sometimes on the façades. The same kind of brick relief like in Harkness Commons but with different composition was designed for the loggia wall, at the College of Science, in the Rochester Institute of Technology (1967).

Another example, not just with the purpose of aesthetics, but also serving as a light filter was his mural titled *Manhattan* (1963) for *Pan Am World Airways Building* in New York which was commissioned by Walter Gropius, one of the architects of the building. The vast mural was composed by black, red and white rectangles fabricated of laminated plastic panels, corresponding to the expression of painting on flashed and sandblasted glass that he had made at Bauhaus in Dessau, around 1925 and 1926. Also, here in the lobby stands (till today) an elaborate wire sculpture labeled *Flight* by Lippold. In that same period, Albers was involved in the production of other murals like *Structural Constellations*<sup>168</sup> (1959) in the Corning Glass Building that consisted in compositions of simple lines that formed rotated square volumes, carved into a white marble wall and filled with gold; or the mural *Portals* (1961), at the Rockefeller Center, that created an illusory depth by the arrangement of two receding squares made of bronze and colored glass in two colors. Both these works were made in New York City.

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<sup>167</sup> Juan Carlos Rico, *op.cit.*, p. 203.

<sup>168</sup> “*Structural constellation*” is a representative concept of Joseph Albers that he developed starting with 1948, it was a series of engravings on black, brown or grey laminated plastic where he explored geometric floating forms of a rotational symmetry. In 1972 on the main façade of Landensmuseum in Münster was installed a sculpture of stainless steel of this series, in the reconstruction (2014) of a new extension building the sculpture was preserved and reinstated.

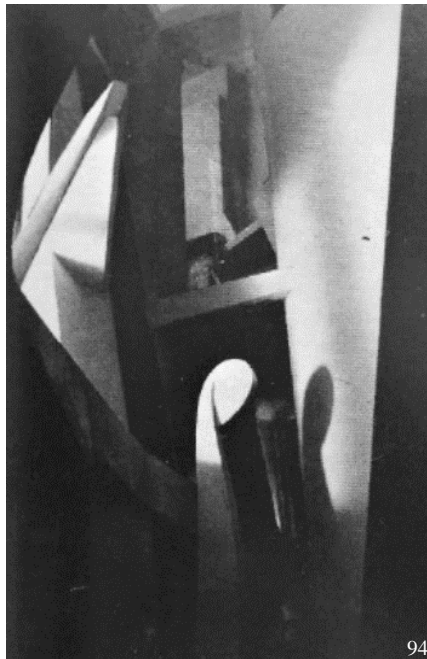


Fig. 91. Interior of the Merzbau, by Kurt Schwitters 1933.  
 Fig. 92. Interior of the Merzbau, by Kurt Schwitters 1933.  
 Fig. 93. Madonna sculpture, Merzbau, 1930.  
 Fig. 94. Detail of Merz-column, 1923.

## MERZBAU

*The desiring house, the house machine of Kurt Schwitters (...).*<sup>169</sup>

Kurt Schwitters was a German plural artist involved in several movements; this artistic diversity derives from his close connection with Der Sturm art gallery and magazine from Berlin that included a diverse style program exposed between 1910 and 1932. In the period mediating from 1917 to 1918, Kurt was focused on Expressionism and Abstraction, followed by Dadaism and in 1922 was orientated on stylistic principles of Constructivism as well Surrealism. At Der Sturm, he had close contacts with other artists like Theo van Doesburg, Kandinsky, and others. He also collaborated with El Lissitzky, and in the same period, around 1923, their projects, although with many differences in conception, approached the same principles of transformation of work within a host structure: from pictorial or sculptural work into the investigation of architectural space. Schwitters was involved in his lifetime's project Merzbau, and Lissitzky elaborated his Proun Room (earlier mentioned).

After the destroyer effect of the First World War, in 1918, Schwitters started a new artistic vision *based on processes of collage and assemblage*<sup>170</sup> from all kinds of residues found in the past as well as and diverse abstract elements. Besides his extensive contact with various artistic vocabularies, none of them served to characterize his works, and in 1919, he defined his activity as his own movement, "Merz," that resulted in a sum of individual forms, composed of images, poems, theater, publicity, printing that were fueled by avant-garde ideas. For him, Merz was more than just a stylistic expression it was a transformation of the world, and a way of living. Schwitters wrote: *For me, Merz has converted into the conception of the world. I can't change my point of view. My point of view is Merz,*<sup>171</sup> as well he called himself as Merz.

The essential part of Merz, where he related art with the outside world, was based on the choice of different kinds of materials and their metamorphosis,

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<sup>169</sup> Jaleh Mansoor, *Kurt Schwitters's Merzbau: The Desiring House* in Nicolin Pierluigi (ed.), *op.cit.*, p. 54.

<sup>170</sup> Margarida Brito Alves, *op.cit.*, p. 31.

<sup>171</sup> Kurt Schwitters apud Javier Maderuelo, in Fundación Juan March, *Kurt Schwitters y el espíritu de la utopía*. Madrid: Iberia, 1999, p. 9.

distributed and organized into aesthetic compositions. These could be cardboard, printed paper, photography, cans, buttons, stones, textiles, wooden and metallic pieces or other three-dimensional ordinary and specific objects in association with colors, lines, and words. In his abstract works, he aspired to combine all the arts in a synthesis, and to appropriate more of the concept of Gesamtkunstwerk, but attempting to create his own Gesamtkunstwerk, by incorporating non-artworks; in his writings, he evidenced: *My ultimate aspiration is the union of art and non-art in the Merz total world view*,<sup>172</sup> and under the framework of Merz he achieved *to efface the boundaries between the arts*.<sup>173</sup> The German artist Hans Richter (1888-1976) that also was involved in avant-garde and met Kurt stated: *"In reality, the total work of art was him: Kurt Schwitters."*<sup>174</sup>

From his various interpretations, Merz passed to extend its frontiers and entered in contact with architectural limits, where one art started to blur into another, forming an "altogether type of art." Schwitters considered that: *Architecture is the artistic genre most oriented to "Merz" thinking*.<sup>175</sup> By his systems of relief assemblages and collages, he created structures out of the walls ceiling and floor, perceived as three-dimensional art installations, which were capable of transforming space and create a unifying and kaleidoscopic experience.

*Schwitters called them Merzbauten (Merz buildings) that were already habitable caves, organic architecture build with waste residues.*<sup>176</sup>

The architectural work that most enhanced and developed the artistic genre of Merz was Merzbau (Merz construction). Created through progressively and organic interventions between 1923 and 1938, Merzbau represented an abstract three-dimensional collage in his home studio in Hannover, Germany. This long-term project extended the limits of the studio and absorbed other rooms; all this aggregation was a place for the preservations of memories about people

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<sup>172</sup> Kurt Schwitters apud John Elderfield, *Kurt Schwitters*. London; New York: Thames & Hudson, 1993, p.31.

<sup>173</sup> John Elderfield, idem.

<sup>174</sup> Kurt Schwitters, *Merz Architecture*, apud Harald Szeeman, *op.cit.*, in Nicolin Pierluigi (ed), *op.cit.*, p. 18.

<sup>175</sup> Kurt Schwitters apud Simón Marchán Fiz, *Del Arte Objetual al arte de Concepto: epílogo sobre la sensibilidad "Postmoderna."* Madrid: Edición, Akal, p. 174.

<sup>176</sup> Javier Maderuelo, *op.cit.*, p. 11.



around him and his reflection on the current events that happened outside of his home, the post-war consequences, like the rise of crimes, disorientation, ruins, or confusion.

The hollow space of Merzbau was 4,4 x 5,4 meters in size and four meters high, started to be aggregated with his Merz-columns along walls, about ten columns with a Dadaist content were titled “Cathedral of Erotic Misery” or just the abbreviation “K de E” which also was a synonym for the whole Merzbau and often used for its description. The stylized geometrical surfaces with *a structure of concave and convex forms*<sup>177</sup> mainly in white and with some accents of color were progressively extended by tying strings or wires, wooden and plaster structures, juxtaposed over walls and ceiling. Also, were employed sculptures, found objects, fragments of photographs, posters, lights everywhere, his objects or things that belonged to his family, friends, and colleagues like Mondrian, Malevich, Arp, van Doesburg, Mies Van der Rohe, Lissitzky<sup>178</sup> and others that were arranged as smalls memorials, and with time the composition was added with other sculptural languages, new people, new forms, colors, and details; all these friendship collections and artistic accumulations created an “other world” experience of a regular human-scale space.

This set of plastic constructions that formed an interior architecture was compared by Schwitters himself with a Gothic cathedral. Its conception was based on De Stijl and Expressionist influences, cubist-futurist principles, the avant-garde collage, reliefs and Dadaist esthetic that resulted *in cave-like formations developing in miniature grottos, recesses, altars and chapels*,<sup>179</sup> where the spectator could move through space and objects. Merzbau was more than a combination of fields; it was a *modern artistic-cultural regeneration, linked to a social political and spiritual transformation which had as utopian ideal “the negation and transcendence of reality.”*<sup>180</sup> As a consequence of such ideas and representations, his art was marked as “degenerate” by the Nazi

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<sup>177</sup> Hans Richter, *Dada Art and Anti-Art*, trans. David Britt. London: Thames and Hudson, 1965, p. 152.

<sup>178</sup> Often Schwitters wasn't notifying artists about borrowing their objects, and when visiting Merzbau they could find their absent possession standing in a memorial or a grotto.

<sup>179</sup> Christian Bjone, *op.cit.*, p. 20.

<sup>180</sup> Jorge Cruz Pinto, *A Caixa: Metáfora e Arquitectura*. Lisboa: ACD Editores: Faculdade de Arquitectura da Universidade Técnica de Lisboa, 2007, p. 232.

regime. In 1937, Kurt Schwitters migrated to Norway, Merzbau remained unfinished, and in 1943 was destroyed by a bomb in an air raid over the city.

Along with his life, he continuously developed constructions of this kind in places where he dwelled, in Lysaker (1937-1938), in Hjertoy (1934-1939) at his summer residence. In 1940 he again moved forced this time to Great Britain, and in Ambleside (1947-1948) he realized his last Merzbau that was concentrated just on a single wall. Later, from 1981 to 1983, based on three general photographs and some close-up pictures the first Merzbau was reconstructed by Peter Bissegger in Sprengel Museum of Hannover.

This work consisted one of the first types of installation that influenced other artists that created similar sculptural ambiances in host structures or site-specific environments. Artists could also use the same techniques but created a different interpretation, for instance. Schwitters even broke and cut parts of the ceiling and floor of the Merzbau, allowing him *to enter into new relations and encounter, to connect to other spaces and objects*,<sup>181</sup> and this way his lifetime project extended upwards to around eight rooms from his home in Hannover. These developing ideas through subtractive processes of cutting interior and exterior limits we can see further in the works of the American artist that studied architecture Gordon Matta-Clark (1943-1978).

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<sup>181</sup> Jaleh Mansoor, *op.cit.*, in Nicolin Pierluigi (ed), p, 59.

## LE CORBUSIER

*“There are no sculptors only, no painters only, no architects only; the plastic incident fulfills itself in an overall form in the service of poetry.”<sup>182</sup>*

Le Corbusier (1887- 1965), was a Swiss-French architect, designer, painter, and writer, his works and ideas constitute a fundamental influence in the development of Modern Movement. His drawings, paintings, sculptures were key tools for transmitting his thoughts; through them he encountered architecture and explored the concept of space, of forms, searching for the best solutions to reproduce in his buildings, in the interior, exterior or in a whole form. He describes this in his essay “Dessins” of 1965:

*Every day of my life was devoted in part to painting. I have never ceased to draw and paint, searching where to find them, those secrets of forms. It is wrong to look for the key to my work and to my research anywhere else.<sup>183</sup>*

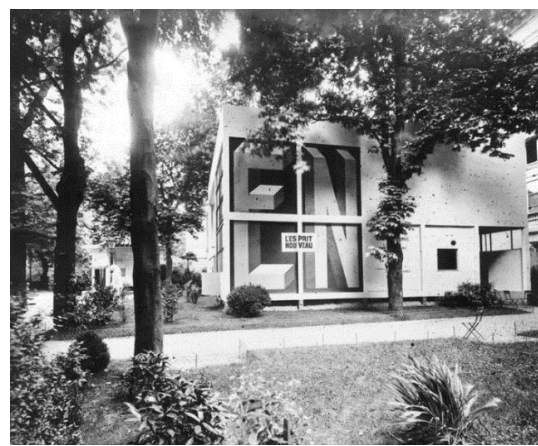


Fig. 95. Façade detail Villa Fallet, 1905    Fig. 96. Pavillon de L’Esprit Nouveau, Paris, 1925.

Le Corbusier entrance into the art world took place in 1902 at the La Chaux de Fonds School of Art, where the Arts and Crafts and Art Nouveau movements predominated. This influenced his early designs for bourgeois clients. Villa Fallet (1905) that was his first designed project, decorated with the spirit of craftsmanship, with polychrome patterning, windows, mullions.

<sup>182</sup> Heidy Weber, *Le Corbusier – The Artist*. Zurich; Montreal: Edition Heidi Weber, 1988, p. 4.

<sup>183</sup> Le Corbusier, *Dessins*, 1965 in Helen Castle, *op.cit.*, p. 8.

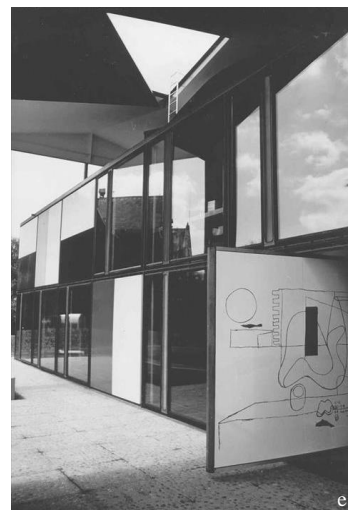
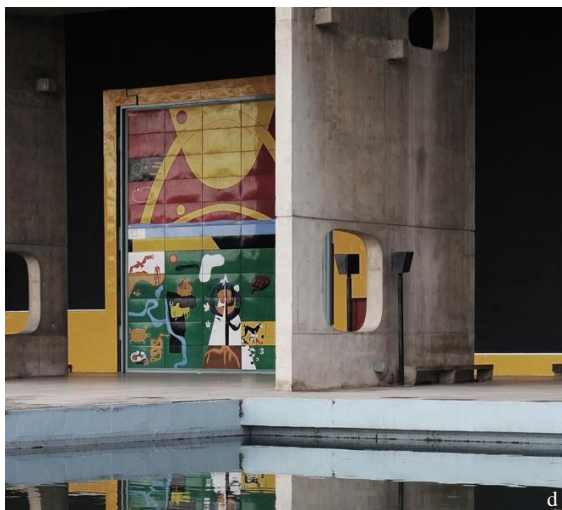
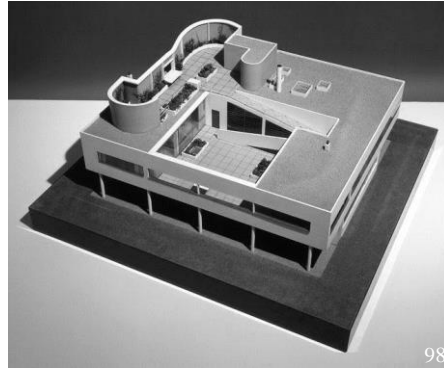


Fig. 97. Still Life. Dishes, 1920

Fig. 98. Model of Villa Savoye, 1929.

Fig. 99. Doors by Le Corbusier. a) Enameled door panels for Notre Dame du Haut, 1955, b) Notre-Dame du Haut main door outside view, c) Notre-Dame du Haut main door inside view, d) Main door of High Court in Chandigarh, e) Pivot painted door in Maison de l'Homme Pavilion in Zurich, 1963.

The façade is with screen printed déco motifs all combining perfect with the Jura landscape, then followed other villas with the same language.

The most important were the collaboration with the painter Amedée Ozenfant and their invention of Purism, in 1918 that lasted till 1925. It was a more academic version of cubism, simplified, based on mathematics or even using the *golden ratio* in compositions, Ozenfant in manifesto described it “as an art as pure and rigorous as the machine.” One of the first projects where purist principles of paintings were applied in building was for the *Pavillion de L'Esprit Nouveau* which was built for the *International Exhibition of Arts and Crafts*, 1925 in Paris. Its furnishing with oversized vessels that also served as room dividers and Corbusier wanted to demonstrate that these pure units of habitation could be agglomerated. *The Pavillion des Temps Nouveaux* (1937) represented a collaboration with Fernand Léger, Charlotte Perriand, and others for the commercial iconography and photo murals of the building.

The Villa Savoye (1928-1931) in a cubist-inspired rectangular form, elevated from the ground with pillars, modulated of curves and straight lines, producing a rhythmic experience. About the internal sculptural spatial dynamic, Cristian Bjone draws an analogy between the purist painting *Still Life Dishes* (1920) by Ozenfant and the similar idea and forms of the villa. The elevated house is standing on a series of thin cylindrical columns which looks like a traditional table, and the elements of the roof repeat the still life objects on the tabletop depicted in painting. The central ramp is like the neck of guitar, the curved rooftop windscreen is the multiple curving profiles of the guitar, the chimneys are like the bottlenecks, and the glass skylights simulate the drinking glasses.<sup>184</sup>

The apogee of his works represents the *Chapel of Notre-Dame du Haut in Ronchamp* (1950-1955), built on the site of a 19th-century church that had been destroyed by a fire in 1944. The notable chapel is a set of innovative shapes, with sinuously curved forms representing a total plastic composition; also. The unpainted curved roof of reinforced concrete creates a contrast with the white painted outside walls.

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<sup>184</sup> Christian Bjone, *op.cit.*, p. 70.

The interior *stands as an emblem of the artistic treatment of light that le Corbusier integrated into his works*,<sup>185</sup> this was achieved by the contrast of light and shadow, and the thickness of the south façade, with different orthogonal-shaped openings of colored glass. The main entrance is a door painted by the architect; he often used doors as a canvas, the main door of the *Palace of Assembly in Chandigarh* (1962) and of the *Pavilion in Zurich* (1963) is another example of his experiments.

In different projects like the *Unité d'habitation in Marseille* (1945), the *High Court in Chandigarh* (1962), the *Maison de l'Homme* (1963) in Zurich, the *Firminy Vert* set of buildings, and many others. According to Le Corbusier, color was to be understood as a means to create, modify or completely transform an architectural space, in one of his essays he writes: *in order to truly perceive white, carefully ordered polychrome forms must also be present*.<sup>186</sup>

Le Corbusier used bas-reliefs on the limits of architectural space with geometric or figurative elements very characteristic of his own plastic vocabulary, he also treated surfaces with murals especially done for public buildings, like in interior of *Swiss Pavilion*. He also wanted to use art in the interiors of residential houses, and came with a different possibility affirming:

*We cannot have murals painted onto the walls of our apartments. However, this woolen mural, which is the tapestry, we may take off the wall, roll up, take under the arm at will and hang up somewhere else, so I call my tapestries "nomadic murals"*.<sup>187</sup>

Through tapestry, he emphasized the presence of the traditional arts in his architecture.

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<sup>185</sup> Danièle Pauly, *Le Corbusier: The Chapel at Ronchamp*. Basel; Boston: Birkhäuser, 1997, p. 44.

<sup>186</sup> Danièle Pauly, *op.cit.*, p. 118

<sup>187</sup> Heidi Weber, *op.cit.*, p. 50.

## JOSEP LLUÍS SERT

*“I have always defended this view and connection of architecture with painting and other fine arts, with the world of vision, considering it in a broader context.”*<sup>188</sup>

He was born in Barcelona, an important center of arts. Through the city's cultural atmosphere and due to the influence of his uncle the painter Josep Maria Sert, he cultivated his interest in painting and sculpture. Later when he was twenty-seven years old, he graduated in architecture, and by a Le Corbusier invitation he went to work with him in Paris, in 1929. In the same year, he founded his own atelier in Barcelona. The artistic ambiance from these cities and his friendship with artists like Fernand Léger, Joan Miró, Alexander Calder or Pablo Picasso, made Sert promote the integration of the arts in architecture along all his life and work in collaboration with various other artists.

Exhibition pavilions had a significant presence through the modern period; they were *special occasions for artistic and architectural ventures*.<sup>189</sup> One of the first aspirations for connection of Josep Lluís Sert was the *Spanish Pavilion at Paris world's fair* in 1937 designed with Luis Lacasa (1899-1966).

*“The entire project was a rare and impressive instance of cooperation among painters, architects and sculptors.”*<sup>190</sup>

This was a pavilion with three stories and a patio, architect, and artists met and discussed dimensions, materials, as well colors. At the entrance, Sert prepared a wall for Picasso, and then appeared his *Guernica* one of the best well renown mural-painting (3,51x7,52) of the 20th century, that represented the dramatic events during the Spanish Civil War (1936-1939); just in front, Alexander Calder designed a mercury fountain. On the main stair wall, Miró painted a panel *The Reaper*, Josep Renau contributed with photomontages.

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<sup>188</sup> Patricia Juncosa (ed), *op.cit.*, p. 28.

<sup>189</sup> Marco Mulazzani, *Art Space/ Art of space. Twentieth-century exhibition pavilions*, in Germano Celant, *op.cit.*, p. 11.

<sup>190</sup> Knud Bastlund, *José Luis Sert. Architecture, city planning, urban design*. London: Thames and Hudson, 1967, p. 38.





Fig. 100. Beginning of Guernica.

Fig. 101. Picasso painting Guernica, 1937.

Fig. 102. Atrium with Guernica and mercury fountain at Spanish Pavilion.

Fig. 103. The Reaper, wall by Miró, at Spanish Pavilion.

Fig. 104. Interior of Spanish Pavilion.

Fig. 105. View of exterior Spanish Pavilion, and sculpture by Julio Gonzalez, 1937.



Outside were sculptures by Alberto Sánchez, Julio González, and Pablo Picasso. Working on this place, he realized the importance of placing artworks in such places where many people gather together, and how works of art formed *an indispensable complement to the architecture*.<sup>191</sup> He also affirmed:

*“So, it was an exciting moment; for me and for the group of people who worked on the project, was an experiment of how the arts could join.”*<sup>192</sup>

As for Sert, these ideas were important principles in 1943 together with Giedion and Léger they wrote the “Nine Points on Monumentality.” In which widely was advocated ideas for unity, proposing a monumental architecture, with new means of expression like mobile elements, projected light, colors, forms that will offer to the construction new freedom and new creative possibilities for painters and sculptors. Architecture will regain a lyric value and will be more than just functional.<sup>193</sup>

The *Maeght Foundation* (1958-1971) in France is another materialization of this idea, Sert’s most significant concern was to meet artists like Alberto Giacometti (1901-1966), Lippold, Kandinsky, Calder, Matisse, Georges Braque, Mark Chagall (1887-1895), Léger, Joan Miró and Josep Llorens i Artigas (1892-1980). They worked together on the site, to reach the perfect coexistence of the works with the building, blending them into the quiet Mediterranean landscape. Sert also designed the *Joan Miró Foundation* (1968), where he sought to create a plastic unity through materials, colors, textures, the treatment of light in the interior, and the simplicity of vanguard tendency.

Sert was also involved in the CIAM (International Modern Architecture Congress) and, from 1947 to 1956, he was its president. In 1947, he made the synthesis between arts and architecture to be the central subject of the 6<sup>th</sup> CIAM, along these years he held discussions, published texts, *in which the role of art was one of collaboration in the search for the new monumentality that would emerge from the emotional life*.<sup>194</sup>

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<sup>191</sup> Josep Lluís Sert, apud Penelope Curtis, *Patio and Pavilion: The place of sculpture in Modern Architecture*. London: Ridinghouse, 2008, p. 64.

<sup>192</sup> Josep Lluís Sert apud Patricia Juncosa (ed), op.cit., p. 23.

<sup>193</sup> Josep Lluís Sert, Fernand Léger, Siegfried Giedion, *Nine Point on Monumentality*, in Siegfried Giedion, *Architecture, You and Me*. Cambridge: Harvard University Press, 1958, p. 48-51.

<sup>194</sup> Octavio Borgatello, *Joan Miró’s Studio*, 1953, in Josep Rovira (ed), *Sert 1928- 1979 complete work: Half a century of architecture*. Barcelona: Fundació Joan Miró, 2005, p.192.



Fig. 106. Sculpture "Dawn" by Kolbe at the Barcelona Pavilion.  
 Fig. 107. Lippold's sculpture World Tree at Harvard.  
 Fig. 108. Azulejo mural by Candido Portinari at Ministry of Education, Rio de Janeiro by Niemeyer.  
 Fig. 109. Drawing by Roberto Burle-Marx for roof terrace of Ministry of Education.  
 Fig. 110. Final design by Roberto Burle-Marx for roof terrace of Ministry of Education.  
 Fig. 111. The Terrace Plaza by SOM, a) mural by Joan Miró; b) mural by Saul Steinberg.

The World War II situation made a lot of artists and architects between 1940 and 1950 to move in the United States, and Sert moved as well in 1939 to New York, where he met his old colleagues and friends from Paris. In 1951, with Philip Johnson, Henry Hitchcock, and others he participated in a symposium on the use of the arts in architecture held at Museum of Modern Art, New York. At the symposium, they presented intellectual syntheses how to combine architecture, painting, and sculpture, as a necessary integration in the contemporary city. The juxtaposition of architecture with sculpture was introduced by some classical examples. Like the antique pyramids with the Sphinx; the geometric Barcelona Pavilion by Mies van der Rohe (1929), where the architect chose a bronze reproduction of female sculpture “Dawn” by Georg Kolbe, masterfully placed it in the pond, thus creating the sensation that it was multiplied in space by its reflection in water, marble, and glass. *“Indeed, in the earliest plan for the pavilion he envisaged having three: one in each pool, and one in the central room.”*<sup>195</sup>

Other examples were the *Harvard Graduate Center* by The Architects Collaborative with the sculpture by Lippold; Sert’s Spanish Pavilion; the *Ministry of Education Building* in Rio de Janeiro by Oscar Niemeyer (1907-2012), that collaborated with architect Lucio Costa, but also with artists. Here is a piece by Jacques Lipchitz (1891-1973) and other sculptors; the landscape designer Roberto Burle-Marx (1909-1994) made a great exotic roof with an abstract drawing, also, the bright tiles of traditional *azulejo* by Candido Portinari (1903-1962) that transform the weight part of the building into a pleasant and light entrance, and a mural in the waiting room. The *Terrace Plaza* in Cincinnati designed by Skidmore, Owings & Merrill LLP (SOM), from the beginning included artists’ works as a part of the architectural design; the murals by Joan Miró and Saul Steinberg, Calder’s hanging and mobile sculpture in the lobby were some of them.

*In this set, painting and sculpture each have their place, not as simple decorative elements, but as autonomous artistic values, while forming an integral part of the composition, which they ennoble and complete.*<sup>196</sup>

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<sup>195</sup> Penelope Curtis, op.cit., p. 14.

<sup>196</sup> Lúcio Costa, *Sobre Arquitetura*. Porto Alegre: Centro dos Estudantes Universitários de Arquitetura, 1962.



## **SECOND PART OF THE CENTURY**

*Expressive dialogues as an experience in real time.*



## THE SHIFT OF FOCUS

Throughout the twentieth century trajectory, we are witnessing at different versions of synergy between architecture and arts. The first part of the century was characterized by the Wagnerian idea of “synthesis of the arts”, which was a guiding principle where many architects applied their multidisciplinary artistic abilities or collaborated with painters and sculptors around a common aim. That was the completion of a building or urban space for the improvement and visual intention. As well in the mid part of the century, this concept continued to be integrated into the development or renewal of architecture under the notion of “*plastic integration*.”<sup>197</sup>

But in the second part of the twentieth century started a regeneration in which were introduced new definitions based on experiences of the integral environment. This cultural sensibility can be inscribed in the term of “open work” launched in 1962 by the Italian philosopher Umberto Eco (1932-2016). It described the fundamental innovations of artistic practices correlated with architecture since the 1950s, such as art happenings, land art, multi-media art, conceptual art among others *which started to engage the public by introducing temporality and interactivity into the perceptual processes*.<sup>198</sup>

The new aspirations introduced a wide range of new descriptive terms used to redraw the boundaries between the visual arts and contemporary architecture at the turn of the twenty-first century.

Moreover, in contemporary art, the interior or exterior space became an inseparable component in the artworks of many artists. If before art was placed in museums only to be observed by the visitors, starting with the second part of the twenty-century art entered in dialogue with architectural or urban limits, it can be inhabited, lived, gaining a scale where the body becomes part of it.

However, the second part of the century demonstrates links and interchanges between art and architecture, and with new aspiration, it continued the fruitful cooperation or reciprocal inspirations.

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<sup>197</sup> Louise Noelle, *Plastic Integration in Mexico: Confluence or Nostalgia*, in Ana Tostões, Ivan Blasi (ed.) *Docomomo International: Art and Architecture*. n°42, Barcelona, (summer 2010), p.15.

<sup>198</sup> Eeva-Liisa Pelkonen, *Introduction*, in Eeva-Liisa Pelkonen, Esa Laaksonen (ed.) *op.cit.*, p. 10.





## ARCHIGRAM

After the postwar period, the evolutions in various fields also marked a significant transformation in the architectural domain, by which emerged new ideas, concepts, and a redefinition of its limits and possibilities.

With an international influence in the English cultural context was distinguished the group *Archigram* that took place after the postwar period, between 1961 and 1974 as a manifestation of the neo avant-garde movements and was thought as a detachment from the previous stylistic image of Modernism. A group of architects and recent graduates created the *Archigram* magazine in London, with a total of nine individual issues, and first published in May of 1961. The idea of this name was intended as a fusion between the abbreviations of architecture, telegram, and aerogram, to be understood as an urgent artistic tendency just as a telegram.

The group was composed by Warren Chalk (1927-1988), Peter Cook (b. 1936), Dennis Crompton (b. 1935) David Greene (b. 1937), Ron Herron (1930-1994) and Mike Webb (b. 1937). Like the previous masters of the 20<sup>th</sup> century, their concern was to recreate a visionary energy and to search a new definition representative to their time *as Warren Chalk stated: it has become necessary to extend ourselves into such disciplines in order to discover our appropriate language to the present day situation.*<sup>199</sup>

Inspired from tendencies of 19th-century industrial architecture, and 20th century new possibilities like science fiction, technology, the special industry as the first moon landing or space traveling capsules, and the aesthetic potential that these fields expressed, they develop extreme and alive projects, not just as an image but as a rethinking of architecture and its surrounding space. Also, the metamorphosis idea of continuous changing was the core of their reflections, and because of these fantastical compositions, their works mainly took place on paper, like drawings and texts in magazines or models and drawings in exhibitions, then on the ground. *Their “historical” models were the artist-architects who tried to create flexible, organic and nomadic*

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<sup>199</sup> William Curtis, *op.cit.*, p. 539.

*structures using technology of their time,*<sup>200</sup> and new materials powerful to reshape.

Their imaginations for megastructural proposals with a cartoon-like representation also were influenced by the art world for example works of Pop Art artists like Andy Warhol (1929-1987) Roy Lichtenstein (1923-1997), Claes Oldenburg (b. 1929) and others. Also, by the art of comics or by futurist drawings of Antonio Sant'Elia, along with his ideas about the future city as a dynamic machine; moreover, they were familiarized with previous styles of Dadaism, Expressionism and with the works of Mendelsohn. Their works formed an important shift in that period, and *from the creation of singular “works of art” such as paintings or buildings to the exploration of art as a lived medium, as a way of structuring everyday life for all.*<sup>201</sup>

*Archigram* works were exhibited at the *Institute of Contemporary Art* in London, where they presented projects that developed new forms for cities, with new *structures of artistic and architectonic thinking*<sup>202</sup> and searched new possibilities of a great design for a better life because the term “comfort” played an essential role in their works. Also, with influences from Buckminster (1895-1983), *their projects might appear functionalist.*<sup>203</sup> In this context, is highlighted the exhibition *Living City* (1963), where there were exposed architectonic proposals of the city, seen as a living organism, mobile and transformable, the drawings in different scales also reflected concerns about the public as well private space. Cartoon drawings of *Walking City* by Ron Herron (1964) also represented an alive and mobile city composed of large spherical structures, in a continuous evolution from one form to another, capable of moving on its sturdy telescopic legs until its inhabitants will find a place to settle.

This undetermined architecture, composed of different urban and residential areas could connect through the means of corridors to form an entire metropolis in constant motion. The version of “Walking City on the Ocean” or “Underwater City” by Warren Chalk also had these particularities.

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<sup>200</sup> Archigram Group, *A Guide to Archigram 1961-1974*. London: Academy Editions, 1994, p. 13.

<sup>201</sup> Simon Sadler, *Archigram: Architecture without architecture*. London: The Mit Press, 2005, p.7.

<sup>202</sup> Ana Marta Feliciano, *A Metáfora do Organismo nas Arquitecturas dos Anos Sessenta: A Obra dos Archigram como Reinvenção de um Novo Habitar*. Lisboa: Caleidoscópio, 2015, p.142.

<sup>203</sup> Hal Foster, *op.cit.*, p. 4.

The example of *Plug-in City* (1964) by Peter Cook incorporated varied themes of the group for redefining the purpose of architecture and kept the central theme of a viable organism. The traditional buildings were replaced with boundaries of collective apartment units, bathrooms, offices, stores also with fast transport links as a standard form, all thought as an entire environment, where several components could be plugged-in or plugged-out according to circumstances.

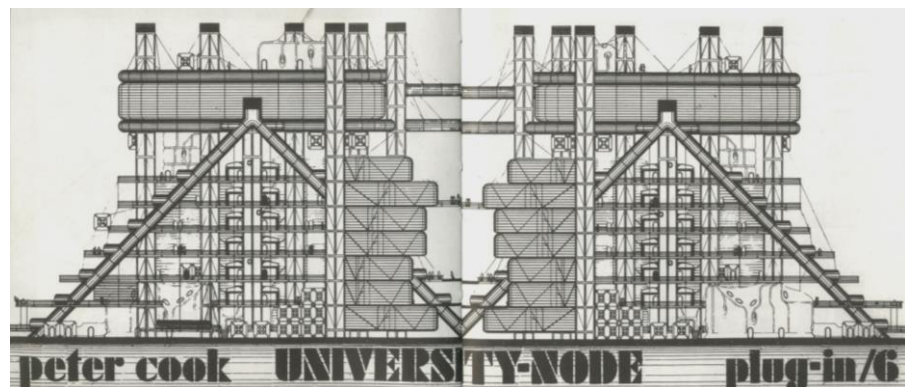


Fig. 112. “Plug in City, by Peter Cook, 1964.

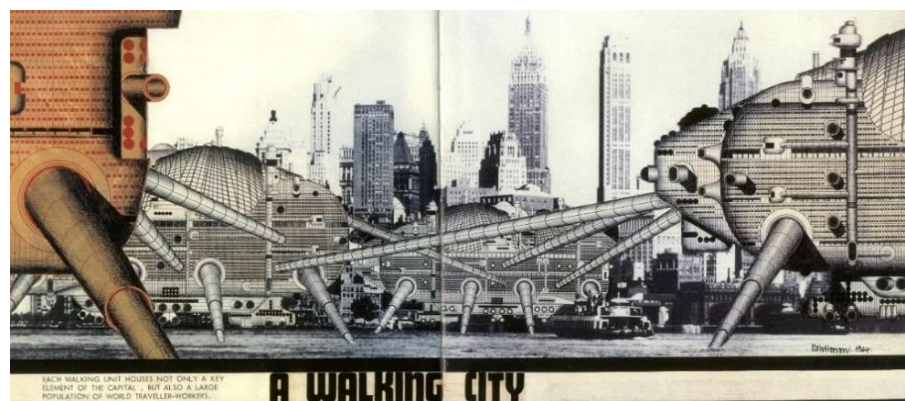


Fig. 113. “Walking City in Manhattan, Archigram 5 by Ron Herron, 1964.

The anti-architectural philosophy of *Archigram* also influenced other architects. For instance, in several references, we can see how *Archigram* played an indispensable source of inspiration for the design of iconic *Pompidou Center* in the Beaubourg area of Paris (1971-1977), by Richard Rogers (b. 1933) and Renzo Piano (b. 1937) partnership. Its association with the *Archigram* progress and high-tech ideas of the 1960s can be understood by its technological image, the mega construction in a rectangular form, with a permeable and transparent structure of steel and concrete.

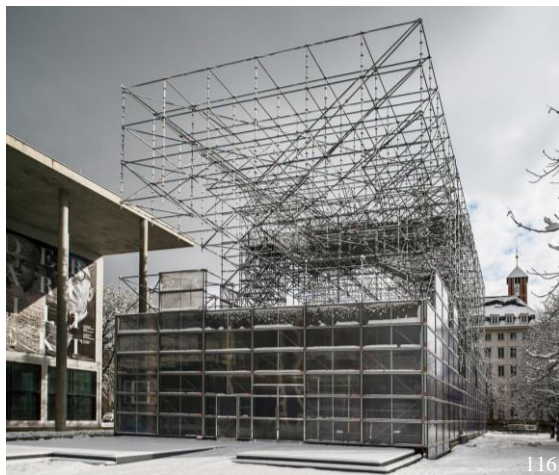


Fig. 114. Centre Pompidou, Paris, 1977.

Fig. 115. Detail of façade, Centre Pompidou, 1977.

Fig. 116. Pinakothek der Moderne, Munich, Jürgen Mayer Architects, 2013.

Fig. 117. Lloyd's building, London, by Richard Rogers 1986.

Fig. 118. a, b) Brendan MacFarlane and Dominique Jakob restaurant Centre Pompidou, 2000.

Through its mechanical services, usually tubes and ducts were concealed and positioned on the façade to allow a flexible and free interior space for the artworks and this aesthetics served *as a contemporary form of ornament*.<sup>204</sup> Also, the pipelines were painted in bright saturated colors, each color signifying a specific function: blue is air, green water, yellow electricity and red is for movement, representing all vertical accesses. For its *Archigram* image also contributed its exterior skin of glass and with prefabricated columns and diagonal braces that allowed open and luminous floorplans and the transparent “wormlike” escalator tube, which dominates the main façade.

The architectural critic and historian Kenneth Frampton (b. 1930) referred *Archigram* as the inspiration for this building affirming that: *The building is obviously a realization of the technological and infrastructural rhetoric of Archigram*.<sup>205</sup> As well the architectural historian William Curtis (b. 1948) noted that this building *would have been inconceivable without the legacy of Archigram*.<sup>206</sup> The *Archigram* member Ron Herron after visiting it said: *ostensibly it appears to be an Archigram building*.<sup>207</sup>

In the period from 1996 to 2000, the restaurant of Pompidou was renovated. The architect Brendan MacFarlane and Dominique Jakob won the competition for the new design. The interior of the restaurant through the thin aluminum was transformed into a sculptural form like caves, deforming the initial rectilinear appearance. Besides its unusual shape, don't influence its functionality. The plastic interior and some portions painted with bright colors, continued the idea of art inside it, just like the whole building that is destined for art.

Richard Rogers continued with the *Archigram* influences in *Lloyd's Building* of London (1978-1986), the enormous construction also had the stair towers, glass elevators and mechanical services distributed on the exterior limits, their natural color of shiny stainless steel were preserved and gave a *high-tech* allure. In the interior, the galleries of office spaces were arranged around a full height rectangular atrium and connected by escalators.

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<sup>204</sup> Hal Foster, *op.cit.*, p. 22.

<sup>205</sup> Kenneth Frampton, *op.cit.*, p. 285.

<sup>206</sup> William Curtis, *op.cit.*, p. 540.

<sup>207</sup> Simon Sadler, *op.cit.*, p. 167.

This High-Tech aesthetic, flexible elements, modular architecture continued to inspire the design of buildings or temporary structures of several architects that explores these ideas. For instance, in 2013 the Jurgen Mayer Architects projected and installed an interim pavilion at the museum of modern art in Munich “*Pinakothek der Moderne*” serving as a temporary home for works and exhibitions we can see the same scaffolding and transparent structure that can be traversed by visitors as at the Pompidou.

In 2016 the architectural firm MVRDV did a temporary project for the historical building Groot Handelsgebouw in Rotterdam, it consisted in a scaffolding staircase of 29 meters high attached perpendicular to the front of the building; moreover, it provided new panoramic views of the city.

Another example can be the museum of art’s Kunsthaus Graz in Austria that has a project by Colin Fournier (b. 1944) and that Peter Cook completed in 2003. The museum sculptural form can be inscribed in a series of edifices that *proclaim their own artistic singularity*.<sup>208</sup> Its biomorphic and irregular character, like a bubble or a cloud form a high contrast with the surrounding baroque city and give a different sensorial and spatial experience. Also, its outer skin of *plexiglass* serves as a communicative display showing internal artistic productions that can change electronically and by this process *creating a symbiosis of art, architecture and media*.<sup>209</sup>

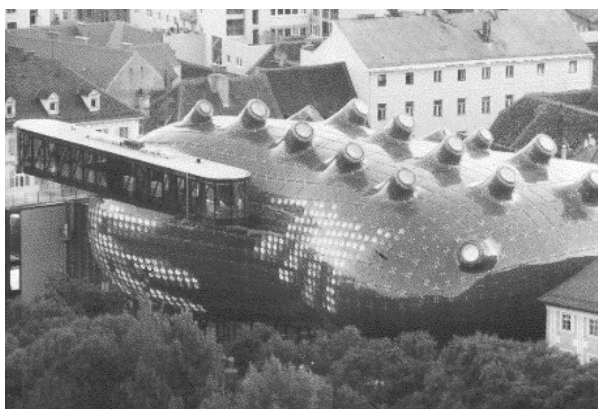


Fig. 119. Kunsthhaus Graz exterior, 2003.



Fig. 120. Kunsthhaus Graz interior, 2003

<sup>208</sup> Colin Fournier, *Kunsthhaus Graz*, in *Jornal arquitectos*, n° 213, Lisbon, (nov./dez. 2003) p. 94.

<sup>209</sup> Jan Edler, *Communicative display skin for buildings: Bix at the Kunsthhaus Graz*, in Branko Kolarevic, Ali Malkawi, *Performative Architecture: Beyond Instrumentality*. New York, London: Spon Press, 2005, p.159.



## MINIMALISM

*“Within the simplicity of the box you discover qualities that makes you aware of the specialness of the space or the things around you.”<sup>210</sup>*

Being a widely used over the last decades with different features, the term Minimalism, emerged in the early sixties in North American context, with roots in European modern painting and in the reductionist tendencies of form and color initiated by the *De Stijl*. It describes the works of artists like Donald Judd (1928-1994), Robert Morris (b. 1931), Sol Lewitt, Richard Serra (b. 1938), James Turrell (b. 1943) and others, that used primary geometrical forms, following different conceptions of reduction, and representing the maximum with the minimum. One of the features was the three-dimensional expressions, artist's used real space as an indispensable factor of the works, and by this process occurred a consistent connection of art and architecture.

Donald Judd was one of the most important minimalist artists, in 1972 he left New York for Marfa, where he made an adaptive reuse; from an abandoned military base, he created a contemporary museum “The Chinati Foundation”. In Marfa, he revealed all his talents in art, architecture and landscape design, combining them into a coherent whole. First, in the landscape of tall prairie grass was installed “15 untitled works in concrete” (1980- 1984), simple minimalist units made from concrete slabs of 2.5 x 2.5 x 5 meters that visitors are free to enter, move and explore.

The “100 untitled works in mill aluminum” (1982-1986) in two of buildings are 100 unique variations of an aluminum cube, that by their reflection and by windows connect the inner and outer spaces. Also, by reflection is possible to experience the metal as it changes with the day light. The *Chinati Foundation* is not just an important example how art and architecture relate to each other, but also how Judd dialogues between art, building and surrounding nature, giving a prosperous air to the village and serving as a source of inspiration. As the unification of arts was his aspiration, he also wrote about this in his 1987 essay “Art and Architecture”.

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<sup>210</sup> Ando Tadao, apud Christian Bjone, *op.cit.*, p.138.

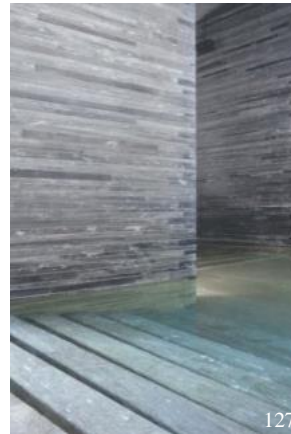
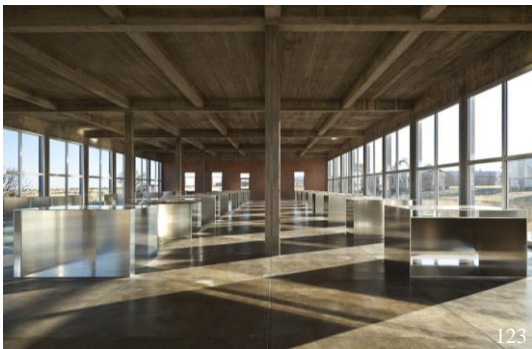


Fig. 121. 15 untitled works in concrete by Donald Judd, Marfa, Texas.

Fig. 122. One cube of 15 untitled works in concrete.

Fig. 123. Judd's "100 untitled works in mill aluminum" 1982.

Fig. 124. One cube of 100 untitled works.

Fig. 125. Barragan House, 1948.

Fig. 126. Las Arboledas park by Barragan, 1962.

Fig. 127. Thermal Bath Vals, by Peter Zumthor, 1996.



*Art and architecture - all the arts - do not have to exist in isolation, as they do now. This fault is very much a key to the present society. Architecture is nearly gone, but it, art, all of the arts, in fact all parts of the society, have to be rejoined, and joined more than they have ever been. This would be democratic in a good sense, unlike the present increasing fragmentation into separate but equal categories, equal within the arts, but inferior to the powerful bureaucracies.*<sup>211</sup>

In the architectural panorama, it was an international movement more accentuated from the seventies, in London, New York and Japan describing works of architects that aspired to a formal simplicity of volume and maxim reduction.

*Minimalist architecture, attempts to draw us back to a different way of living and feeling, one that is calmer, more serene, more worthy.*<sup>212</sup>

The examples of this expressive silence we found even earlier in buildings by Adolf Loos where he evoked a radical aesthetics linked to purism and avoided unnecessary labor in ornate or decoration, even in one of his essays “*The elimination of furniture*” (1924) he remarked that modern architect should conceal in the thickness of the wall all unmovable furniture, as well as the kitchen. Other examples are the play of void and volumes by Louis Kahn in the *Salk Laboratories* at La Jolla, California (1959- 1965), or the simple *Kimbell Art Museum* at Fort Worth, Texas, (1972).

Later residential works of Luis Barragan, like his house in Mexico City (1948), or *Gilardi House* (1976) where he experimented with bright colors of traditional Mexican architecture, light, innovative and simple interiors, purist stairs, where he sought to find calm in the city noise. His master plan for landscape *Las Arboledas*, Mexico City (1962) represent a simplicity of straight lines and forms, trees as well were planted in straight lines, reflecting into a black rectangle of water and onto a white minimalist wall.

Peter Zumthor, monumental and peaceful works combine simple aesthetics, accentuating more experience based on a sense of place as *Vals Thermal Baths*

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<sup>211</sup> Urs Peter Flückiger, *Donald Judd: Architecture in Marfa, Texas*. Basel; Birkhäuser, 2007, p. 30

<sup>212</sup> Franco Bertoni, *Minimalist Architecture*. Basel; Boston; Berlin: Birkhäuser, 2004, p. 11.

in Switzerland (1996), such as Eduardo Souto de Moura geometric compositions usually in white, John Pawson abstractions and almost empty interiors, works of Tadao Ando, Ag Fronzoni or Claudio Silvestrin. In such a way as Mies van der Rohe with his famous phrase “Less is More” the appropriation of this was done by eliminating interior walls and preserving just some, as a visual partition to define space, where columns served as a structural element, allowing to establish an open and transparent plan.

According to Christian Bjone even if Minimal Art and Minimal Architecture have similarities, there is a difference between them: artworks present an impressive break from the earlier modernist background, but architecture manifests a refined stylistic version of the previous International Style.<sup>213</sup>

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<sup>213</sup> Christian Bjone, *op.cit.*, p.137.

## EXPANDED FIELD

*If modernist invented the model of an ostensible “synthesis of the arts”, their postmodern progeny promoted the semblance of pluralist fusion.”*<sup>214</sup>

In the second part of the 20<sup>th</sup> century started a crucial period in artistic thinking, and the new reflections and attitudes ceased to represent space to get involved in it. The rise of sculptural minimalism, post-minimalism, performance art, land art and conceptual art were in the route of these shifting boundaries that were directly linked to the history, for instance, it continued the modernist demand for purity and explored *the largely lost precedent of Russian Constructivist architecture.*<sup>215</sup>

*Sculpture is rather only one term on the periphery of a field in which there are other, differently structured possibilities.*<sup>216</sup>

Finding that the definition of “sculpture” was not sufficient nor suitable to express the practices of a categorical of “no-mans-land” sculptures that “*it was what was on or in front of a building that was not the building, or what was in the landscape that was not the landscape,*”<sup>217</sup> the American art theorist and critic Rosalind Krauss (b. 1941) in her essay “*Sculpture in the Expanded Field*” in 1979 introduced the “*expanded field*” to designate the new sculptures that emerged from the decade of the 1960s and onwards, which announced the end of the modernist epoch. She called them “*surprising things*” those originalities moved beyond the limits of the traditional techniques and conditions, dissolved frontiers and established new relations with architecture and landscape. Krauss explained that in the new period, the modern sculpture shifted its idea of a monument or statue to a pure independent form, which operated with the loos of site, and in this sense, was created a condition of “*pure negativity*” that was the inverse logic of the terms architecture and landscape.

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<sup>214</sup> Spyros Papapetros, Julian Rose (ed.) *Retracing the expanded field. Encounters between Art and Architecture*. Cambridge, England: The MIT Press, 2014, p. VII.

<sup>215</sup> Hal Foster, *op.cit.*, p. 74.

<sup>216</sup> Rosalind Krauss, *Sculpture in the expanded field*, in Hal Foster (ed.) *Postmodern Culture*. London, Pluto Press, 1985, p.38.

<sup>217</sup> *Ibid.*, p. 36.

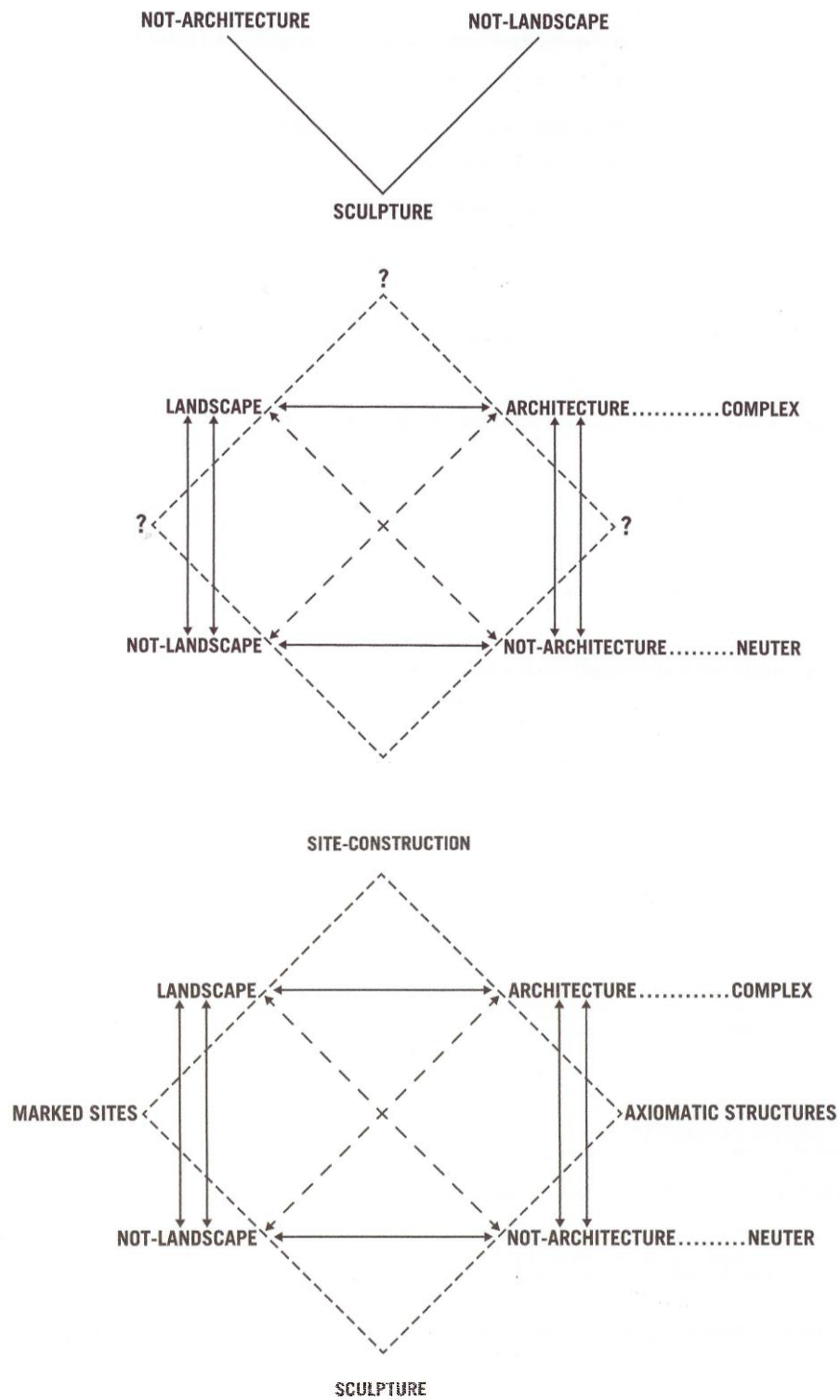


Fig. 128. Diagram Expanded Field by Rosalind Krauss, 1977.

<i>Positive:</i> architecture and landscape	And the new creations resulted from a careful calibration with the <i>not-architecture</i> and <i>not-landscape</i> ; also, this negativity could be converted in positivity by integration of architecture and landscape. From this set of binary
<i>Negative:</i> not-architecture and not-landscape	oppositions to which sculptural art was suspended resulted in the expanded field in which:

*Krauss reassessed the boundaries between art and architectural practice within postmodern cultural production.*<sup>218</sup>

She structured these consequences in a logical diagram based on the mathematical fourfold logical structure that revealed a different character where art has toyed metaphorically and literally with the architectural dimension.<sup>219</sup> The new sculptures opened a realm of possibilities like the conjunction, combination, confrontation between the categories of the grid. For instance, how can be seen in the first diagram this activity still can be referred as sculpture by the mediation of terms not-architecture and not-landscape also land art that is neither landscape nor architecture might best be defined by this combination of a double negative. The mediations continue in the next diagrams where marked sites mediate not-landscape and landscape; not-architecture and architecture by axiomatic constructions; landscape and architecture by site-constructions.

The expanded field is a complex one that has occurred in creations of many artists that across multiple locations simultaneously produced interventions with special effects into the landscape or architecture. Through art, they explored possibilities of architecture and not-architecture. The diverse strategies included happenings, performances, installations, land art, or site-specific works. These ideas were present in the works of minimalist artists, but also after it is distinguished a range of artists whose practices are singular. Artists explored and challenged interconnections between art, architecture, landscape, sculpture, photography, and other fields beyond form and function.

Earlier mentioned Robert Smithson is an artist that was engaged in large-scale outdoor projects. Starting his career as a painter in New York he left this

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<sup>218</sup> Robin Wilson, *Retracing the Expanded Field: Encounters between Art and Architecture*. Journal of Architectural Education, November 2016. p.2

<sup>219</sup> Anthony Vidler, *op.cit.*, p. 158.



Fig. 129. Spiral Jetty by Robert Smithson, 1970.  
 Fig. 130. Nancy Holt Sun Tunnels (1973) in Great Basin Desert, Utah.  
 Fig. 131. Mirror/Salt Works, 1976, by Robert Smithson.  
 Fig. 132. Olafur Eliasson Riverbed (2014) MOMA, Denmark.

busy city for working in distant and unpopulated locations to create views that will perform experience for the spectator, and in his artistic path in 1968 he defined his sculptural innovation of dialectic “*Non-Sites and Site.*”

*Art today is no longer an architectural afterthought, or an object to attach to a building after is finished, but rather a total engagement with the building process from the ground up and the sky down.*<sup>220</sup>

*Site:*  
the specific place  
where artist work, for  
instance natural  
environments

*Non-site:*  
gallery or museum  
space in which by photos,  
and other samples is  
displayed the site

This idea was absolutely engaging in his work. The most impressive example is *Spiral Jetty* a performative extension projected into the reddish water of Great Salt Lake, Utah, North America, realized in 1970. Located out of the shore with more than 450 meters long artificial spiral and 4,5-meter-wide was composed of black basalt rock, earth, algae and white salt crystals, that transformed and altered the place. Other his circular works, experimental and equilibrated include *Broking Circle/Spiral Hill* (1971) in Emmen, The Netherlands, or *Amarillo Ramp* (1973) in Texas. These *sites* he also correlated with *non-sites* through several photographs, films, maps, descriptions, but also sculptures composed of natural elements, and all this documentation were exposed into galleries and at the same time belonged to both sides of the dialectic. Smithson divers non-site works as *A Nonsite* (1968), or *Tar Pool and Gravel Pit* (1966) that represent minimalist boxes filled with earth or stones anticipate the sustainable architecture or our days in which especially inner squares or roofs (box) are filled with earth or stones for diverse decorative or functional purposes. Moreover, his non-site works like *Mirror with Cracks and Dust* (1968), *Mirror/Salt Works* (1976) or others are among first and modest attempts to bring natural environment in interiors, compared with contemporary Danish-Icelandic artist Olafur Eliasson (b. 1967) site-specific work *Riverbed* (2014) exposed at Louisiana MOMA, Denmark.

The Krauss also cited his *Mirror Displacements in the Yucatan* (1969) in Mexico that represented a series of nine works where various mirrors of square form were displaced in real time in diverse natural contexts like nature, earth, sand, or water. These left behind just a memory and photographic evidence that could be exposed in galleries. In some works of Robert Morris, we also observe the focus on mirrors, for example, *Untitled, (mirrored boxes)* of 1965

<sup>220</sup> Robert Smithson apud Christian Bjone *op.cit.*, p. 116

represent an exterior installation made of simple mirror cubes that visually became a continuation of the surrounding landscape; even if they are not landscape, this compound enriches the scenery and give a poetic image. Recycling materials were a key motif in most of the works. Also, these projects of land art or architecture presented an efficient solution, and a new life for devastated, abandoned or polluted aspect of those places in which artist found inspiration.

The list of artists continues with Nancy Holt (1938-2014) that also used circular forms, like her installation *Sun Tunnels* (1973) in Great Basin Desert, Utah. These works were composed by four concrete cylinders with three meters in diameter metaphorically arranged in Greek cross with a void space in the center. They served as an orientation in the desert, a protection of sun and wind, also it could be perceived as a tribute to her husband Smithson that in the same year passed away. Mary Miss (b.1944), Richard Long (b. 1945), two artists with a sense of the architectural nature, Dan Graham (b. 1942), Matta-Clark and others. Born in an artistic family of an American, European and Latin background, Gordon Matta-Clark was an architect that immersed into the artistic practice in which he oscillated in an alternative way with the architectonic spaces. His striking works throughout New York, New Jersey or Europe were different buildings immersing in a state of abandonment, devolution or destined for demolition that he converted in abstract sculptures by his “extractions” ideas and experiments. His famous splitting and cutting actions by chainsaw directly in ceilings, walls, floors, façades and even roofs echoed and framed *the cubist vocabulary established by Braque and Picasso*<sup>221</sup> in a new interpretation, never represented before, that changed the interior and exterior environments, perceptions of conventional concepts and elements of a building, and diffused past and present identities of the construction.

Matta-Clark established like a manifesto the term “Anarchitecture” a combination of “anarchy” and “architecture” that was a search for qualities beyond the rule,<sup>222</sup> also it englobed this expanded field generation which was aspiring to establish a new order and to manipulate metaphoric ideas. Christian

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<sup>221</sup> Thomas Crow, *Gordon Matta-Clark*, in Corinne Diserens (ed.), *Gordon Matta-Clark*. London: Phaidon Press, 2003, p. 114.

<sup>222</sup> Hubertus von Amelnxen (ed.), [et. al.]. *Gordon Matta-Clark Moment to Moment: Space*. Nürnberg: Moderne Kunst, 2012, p. 122.



Bjone also explains that it could be called “Anti-architecture.”<sup>223</sup> This also recalls the anti-art of ready-made, the disfigurations, interventions on objects, and other attitudes by artist Marcel Duchamp (his godfather) (1887-1968) around the 1920s. The intervened structures were a passage from ruins to tabula rasa because they could exist some hours, months or years, but continued to be a permanent metaphor. One of his first projects was A W-Hole House: Datum Cut (1973) in Genoa, Italy, here in one-story office he started to cut-out sections of the interior walls, and the abstract grid which has been created by his horizontal voids in ensemble with vertical lines of black frames of doors and windows recalled the Mondrian pictorial compositions. In other projects such as Bingo (1974) in Niagara Falls, New York in which he retreated one façade and made visible the views of interior compartments and their structural skeleton also can be associated with Mondrian geometric.

*Splitting* (1974) in New Jersey was an intervention of separation in half of the family house owned by his art dealers that was prepared for demolition. Two actions made this work: the first one was a single transversal cut through the two floors of the building and the second was its opening with pneumatic machines, this process opened a dialogue between interior and exterior, private and public; the house was demolished after three months as planned. The following year in New York he clandestinely captured under his force a moribund pier on the west side of Manhattan island. Named *Day's End* it represented a significant almost three meters retreat in the form of the swollen moon into the façade, and other cuts as an experience of scales. The diverse judicial processes as consequences of the illegal execution of this project made him make extended trips to Europe.

Invited to the 9th edition of the Biennale of Paris, in the historical district of the city Matta-Clark created his most distinguished intervention *Conical Intersect* (1975), that challenged *the meaning of both architectural and artistic modes of production*.<sup>224</sup> This work like other mentioned the social change and urban development. It englobed a spherical hole in the façade that continued transversely through edifice in a conical form of four meter in diameter and

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<sup>223</sup> Christian Bjone, *op.cit.*, p. 115.

<sup>224</sup> Dalia Judovitz, *Drawing on Art: Duchamp and Company*. Minneapolis; London: University of Minnesota Press, 2010, p. 212



Fig. 133. Conical Intersect ,1975, Matta-Clark.  
 Fig. 134. Louise Kahn's project of Parliament Building, 1962-1983, in Dakha, Bangladesh.  
 Fig. 135. Splitting, exterior, 1974, in New Jersey.  
 Fig. 136. Splitting interior ,1974, in New Jersey.  
 Fig. 137. Office Baroque, 1977, interior floor.  
 Fig. 138. A W-Hole House, Datum Cut, Core Cut, Matta-Clark, 1973.

series of circular cuts *in doing so, he transported the Duchampian break through the brick wall in Given that constructed the peephole effect.*<sup>225</sup> In this project he also achieved basic principles of modernist architecture, like an entire atmosphere of light, transparency, air, and multiple spaces that communicated between them through the openness; the same scopes were approached in the near project of the Pompidou that was under construction. This reconfiguration was spectacles of sound and light for passers-by; instead Matta-Clark was fascinated with interiors, the views, displacement, and alterations, the possible relationships between spaces, equilibrium, stresses, the eruption of sunlight through the sliver or substantial cuts and the experience of being inside these compositions.

At another invitation this time in Antwerp, Belgium he produced one of his last works *Office Baroque* (1977). Prohibited to act on the building's outer shell he intervened just in the interior of the five-floor building, he again energetically liberated circular cuts, boat-shaped or drop dissections and transparency that created unexpected apertures and incisions. From his works lasted just some physical parts of buildings that are exposed in museums today; but his oeuvre was preserved by vast documentation made by himself, like videos, sketches, letters, writing, photographs from different angles, and many of them aggregated in collages to recreate the three-dimensional idea of physical interventions.

Despite his short career, his intense energy influenced the succeeding generation of architects and artists. His artistic concepts of extraction became a potential and a hint adopted in architectural practice of different architects. For instance, the customary aspects of Gordon Matta-Clark's work we see in Louise Kahn's project of Parliament Building (1962-1983) in Dakha, Bangladesh here the large circle, or waxing moon cuts in the façades or internal divisions, the spiritual atmosphere in interior created by light that enters through these sections. Kahn also carved the colossal circular openings in outer walls in Indian Institute of management (1962-1974) Ahmedabad. The new experimentations of existing urban spaces, the aspect of transparency and the possibility to see simultaneous spatial perspective or to see and to be seen was adopted by Dan

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<sup>225</sup> Ibid., p. 207.

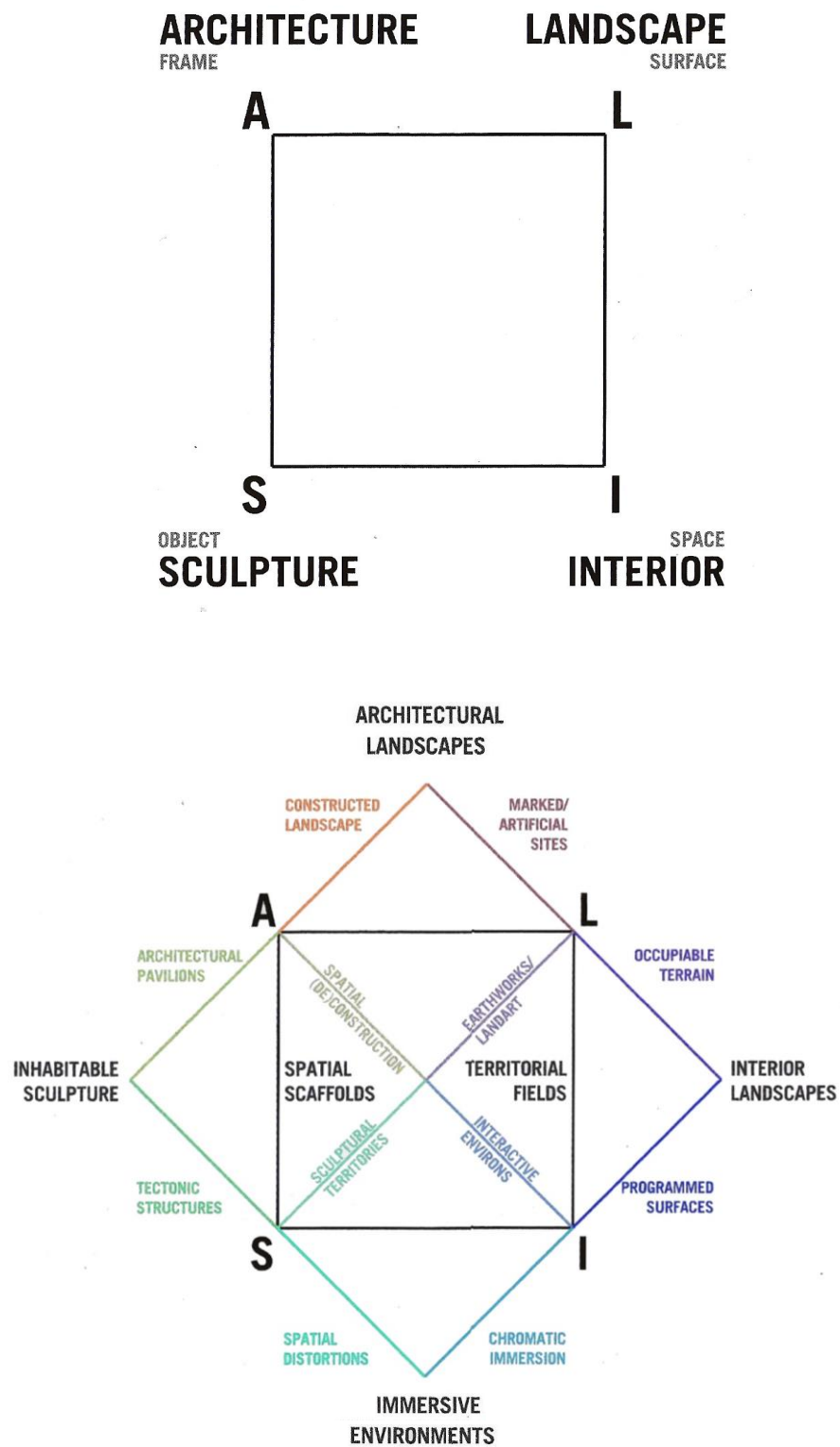


Fig. 139. Diagram by Ila Berman and Douglas Burnham, 2011.

Graham in his inhabitable architectonic sculptures like glass, and like in *Pavilions*, in which he introduced translucent and opaque glass, glazing or mirrors.

The term of Expanded Field that integrates a diverse range of ideas, with the passing of time continued to blur the fields. The possible practices and attitudes were progressively increasing in the built environment, and diverse authors reused Matta-Clark the transparency doesn't represent just spatial ideas but also a dissolution between private and public, interior and exterior, as a helping form to designate new works. The Korean-American curator Miwon Kwon (b. 1961), in her book "*One Place after Another*" (2002) continued to analyze a series of artistic terms<sup>226</sup> that have emerged in specific urban or architectural contexts in the period around the 1960s to 1995s. As well showing their impact on contemporary notions of place, public realm, identity, and community.

Following the heritage of Krauss starting with 2011 architects Ila Berman and Douglas Burnham evolved in the exploration of confluences and overlapping territories between contemporary art and architecture, known as installations. Directly inspired by the Krauss diagram they expanded it in a new conceptual matrix based on *four* principal terms of architecture, landscape, sculpture, also interior. By extracting the possible negotiations between these disciplinary domains was exposed the richer constellation of transdisciplinary occupation. The result of this extensive dialogue about diverse ideas and relations between art and architectural practices since the 1960s was arranged in *six* interdisciplinary hybrids that further generated *twelve* typologies (fig. 139). Douglas Burnham explains:

*A network of four conceptual axes with six primary categories and twelve subcategories (...) of art and architectural installation.*<sup>227</sup>

Considering that in general *installation opens up both art and architecture*

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<sup>226</sup> The terms englobed the site-specific idea like site-determined, site-related, site-referenced, etc., and further the notions that extended the limitation of site specificity, like context-specific, project based, audience-specific, new genre of public art, culture in action, and other similar by diverse artists, critics, historians. Miwon Kwon, *One Place after Another: Site-Specific Art and Locational Identity*. Cambridge, Massachusetts: The MIT Press, 2002, p. 1-9.

<sup>227</sup> Ila Berman, Douglas Burnham, *Expanded Field: Architectural installation beyond art*. New York: Applied Research and Design, 2016, p. 48.



Fig. 140. Anish Kapoor, Cloud Gate, general view. Chicago, 2004.

Fig. 141. Anish Kapoor, Cloud Gate, interior view.

Fig. 142. Dots Obsession (2016) by Yayoi Kusama at Glass House of Philip Johnson.



to a productive critical practice, crafting a much richer, and more nuanced, trans- disciplinary conversation,<sup>228</sup> they presented these diagrams and emerging works of artists and architects that could be inscribed in these categories, in a didactic exhibition *Expanded Field: Installation Architecture Beyond Art* (2012) in San Francisco, California, followed by a book in 2016 with the same title.

Into the branches of these semiotic frameworks was included artists already enumerated by Krauss in her essay, minimalists and others of our days that were grouped in these specific definitions. Some of them are:

Anish Kapoor (b. 1954) and his *Cloud Gate* (2004) a significant sculpture in the Millennium Park in Chicago, one of the most known permanent work. This fluid structure of stainless-steel of ten meters high and twenty meters long, with a highly polished skin just like a mirror reflects in it the city's skyline and changing the atmosphere, creating a dialogue between sculpture architecture and weather. Its aesthetic perception and center passerby reflect other close dialogues with people and sculpture. In this park, another communicative architectural artwork coexists. *Crown Fountain* (2004) by Spanish artist Jaume Plesna (b. 1955) that created it with the assistance of architects Krueck & Sexton are two fifteen-meter-high towers of glass brick with incorporated led screens that display the faces in the motion of more than 300 of cities residents. The images change regularly, and at the end of each video sequence, the faces on the screen begin to spout water like a fountain from their lips into the pool of six-millimeter-deep in front of these conceptual towers. This artistic performance changes the idea about fountains, it gives value to the public space, and create a continuous interaction, diverse experiences of people with this place.

Inhabitable sculpture *Sequence/Torqued Torus Inversion* (2006) by Richard Serra, that represent two related sculptures of steel positioned side by side in a curved plan at the scale of architecture, the forms create a distorted walkthrough space where people can enter, walk and explore the interior, material chromatic, light or shadows created by its plasticity.

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<sup>228</sup> Ibid., p. 50

Spatial (De)Construction beside the works of Matta-Clark, more recently is exemplified by the unusual sculpture *House* (1993) by Rachel Whiteread (b. 1963), where she turned an invisible home, from a state of demolition into an artwork. The three-story Victorian house in London molded entirely by concrete that closed the interior space, all that had been air was converted in solid, and the negative place is transformed into positive mass, it persisted like a silent monument still its demolition in 1994.

Art that enhances the whole interior space represent the examples of immersive chromatic and graphics environments in exhibition places. For instance, a pictorial space *Housewarming MyHome* (2007) by J. Mayer H. Architects in Vitra Design Museum, Germany. Is an intensive graphics work, its abstract and colored forms are extended on the floor, walls, and ceiling blurring the limits of the space and creating an illusory effect. Some portion of the design is extruded and form seating zones for visitors that can immerse its perception. This total distortion was inspired by Deconstructivist architecture, especially of Gehry.

*Dots Obsession* (2003) is another enclosing installation by Japanese artist Yayoi Kusama (b.1929). The painted polka dots in different sized and with an intense chromatic dominate in all interior space suggesting dissolution of exhibition rooms and the amorphous objects distributed inside. In 2016 Kusama executed another installation based on dot idea for the *Glass House* (1949) by Philip Johnson. Here the red dots cut out of paper were fulfilled in all surface of the glass façade, as well dots appearing as steel spheres of thirty centimeters were installed in the pond near to Johnson's house, and float on the water consonant to the wind. All works accumulated by Berman and Burnham are widely diversified, representing diverse ideas of how separate domains could unite and establish new dialogues of this conversation of architecture with art.

*Building are too much and painting or sculpture is not enough: that is the brief reason why installation art or architecture has come to fore in recent years.*<sup>229</sup>

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<sup>229</sup> Raron Betsky, *1980-2013: The rise of the empire of installations*, in Ila Berman, Douglas Burnham, *op.cit.*, p. 368.



## DECONSTRUCTION

*The visual and media arts and (...) architecture, an array of disciplines that might be grouped under the term “spatial arts.”*<sup>230</sup>

Just like in the artistic mediums since the 1960s were recorded new visions and tendencies, in the late 20th-century architecture also followed a different sensibility where the traditional, pure and quite forms have been awakened in a rhythmic dance of details that defined the space, and this new approach was Deconstruction. These characteristics also conquered the painting and sculpture of final part of the century, in which were created representations related to expressive situations of deconstructivist architecture and its theoretical ideas in works of Francis Bacon (1909-1992) Valerio Adami (b. 1935), Dan Graham, Zoe Zenghelis (b. 1937) and others. Its fundamentals derived from the philosophy of “*deconstruction*” and other writings since 1967 by Jacques Derrida that is considered the principal definer of this phenomenon. His reflections are the reaction to what other philosophers, historians have written already about the link of architecture with philosophy, such as Aristotle, René Descartes (1596-1650) Immanuel Kant (1724-1804), Benjamin Walter (1892-1940), and Martin Heidegger (1889-1976) among others. And Deconstruction is not systematic ideas or theory but is a strategy. Derrida described deconstruction about architecture as:

*(...) the “soliciting” of an edifice, “in the sense that Sollicitare, in old Latin, means to shake as a whole, to make tremble in entirety.”*<sup>231</sup>

Another primordial piece of the fundament of this movement represents a historical relationship with the earlier Russian Constructivism: their intellectual revolution, architectural ideas especially the overlapping, intersection of geometric forms, artistic language by such artists as, Lissitzky, Tatlin, Malevich, Krinskii or others, those echoes will be seen transformed and twisted as a dynamic reality in art and architecture of deconstructionist pioneers.

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<sup>230</sup> Peter Brunette, David Wills, (ed), *Deconstruction and the Visual Arts: art, media, architecture*. Cambridge: University Press, 1994, p. 1.

<sup>231</sup> Mark Wigley, *The architecture of Deconstruction: Derrida's haunt*. Cambridge; London: The MIT Press, 1997, p. 35.

For instance, the dynamic and geometric aesthetic from Constructivism in Deconstruction is understood as a structural situation, the conflict is not between forms but within them, and the same distorted language can be observed outside and inside in the same way. It derivation contains elements from Cubism like the deconstruction of forms, also Dadaism and Minimalism. Otherwise, John Griffiths made specific associations with some previous artistic strategies, like Duchamp *interpretations*,<sup>232</sup> René Magritte (1898-1967) illusions, De Chirico (1888-1978) and Francis Picabia (1879-1953) physical disconcertment, even Joseph Beuys (1921-1986) performative blackboards.<sup>233</sup>

The first apparition of *Deconstruction* as an architectural notion started around 1988 with a description by academic and architectural publisher Andreas Papadakis (1938-2008) in two international architectural magazines based in London and founded by him *Art and Design* and *Architectural Design*. In the summer of the same year followed an exhibition and a symposium at the Museum of Modern Art in New York entitled *Deconstructivist Architecture* organized by Philip Johnson and Mark Wigley (b. 1956). The exhibition wasn't intended to present a new style but to unite a group of seven architects of the period between the 1970 and 1980 that besides their very different locations they expressed similar characteristics and intersecting points in their architecture.

Deconstruction is not to destroy, to deteriorate, to dismantle, to decay, nor to disintegrate something built but is the architecture that from the beginning is conceived with a positive attitude and meticulous set of concepts, for visualization and experience of the new space. These could be, fragmentary appearance of totality, crumbled surfaces, careful arrangement of pure geometric volumes, their intersection or subtraction, dislocation, distortion, irregular openings of perfect balance, among other similar motifs that form an entire consonant architectural composition, and as a final image *it becomes unclear which came first, the form or the distortion*.<sup>234</sup> Although this skillful dialogue with contrasts doesn't have a traditional aspect or theory, it continues

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<sup>232</sup> For instance, Duchamp's painting *Nude Descending a Staircase* (1912) or objects that he deconstructs, but this destruction is not meant to destroy the object but to find what is art, or new art; as well deconstruction in architecture don't destroy but define a new approach.

<sup>233</sup> John Griffiths, *Deconstruction Deconstructed*, in Andreas Papadakis, Catherine Cooke, Andrew Benjamin (ed) *Deconstruction: Omnibus Volume*. London: Academy Editions, 1989, p. 97.

<sup>234</sup> Philip Johnson, Mark Wigley, *op.cit.*, p. 17.

to have in question the traditional ideas, like fully taking into account its surroundings and concerns on the aesthetics and usefulness of the work of architecture.

Derrida based on his collaboration experience in projects of architecture with the architects like Peter Eisenman and Bernard Tschumi (b. 1944) realized that the most efficient way of putting Deconstruction to work was by going through art and architecture. Furthermore, he stated that Deconstruction is not about creating something pure and original but is just to put architecture in communication with other media, other arts, to contaminate architecture, another essential aspect is to open up the academic boundaries.<sup>235</sup>

The primordial architects that have been concerned to expand the limits of the classical and stable model of architecture into uncanny and radical construction based on enumerated principles of this movement are Frank Gehry, Rem Koolhaas (b.1944), Bernard Tschumi, Peter Eisenman (b. 1944) Daniel Libeskind (b.1946), Zaha Hadid, Coop Himmelblau and others.

Zaha Hadid in an interview with Ivan Margolius explained that her paintings were influenced by the Russian Suprematist and Constructivist artists, also paintings by diverse members of The Office for Metropolitan Architecture (OMA), but later gained their freedom. Her paintings experimentation, layering, perspective and isometric acted as a laboratory for research and methodological development of the project,<sup>236</sup> and through these artistic perceptions she cultivated her professional identity and defined her presence in the international architectural world. Graduating in 1977 Hadid started her vision, in which she *draws inspiration from art's autonomy and becomes in Malevich's terms a form of pure art.*<sup>237</sup> She thought that was unfinished and it deserved to be continued. In her projects in the same measure experienced with artistic and architectural potentials. First of all, creating her utopian paintings she visualized a future architecture, and she achieved transforming them into an entire fluid body of the architecture.

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<sup>235</sup> Jacques Derrida in *Discussion with Christopher Norris*, in Andreas Papadakis, Catherine Cooke, Andrew Benjamin (ed), *op.cit.*, p. 71-73.

<sup>236</sup> Zaha Hadid, cit. by Ivan Margolius, *Paintings as Architectural Storyboards: Zaha Hadid in Conversation with Ivan Margolius*, in Helen Castle, *op.cit.*, p. 14- 23.

<sup>237</sup> Germano Celant, Zaha Hadid: *Adventure in Architecture*, in Germano Celant Mónica Ramírez-Montagut (ed.) *Zaha Hadid: Thirty years of architecture*. New York: Guggenheim Museum, 2006, p. 18.

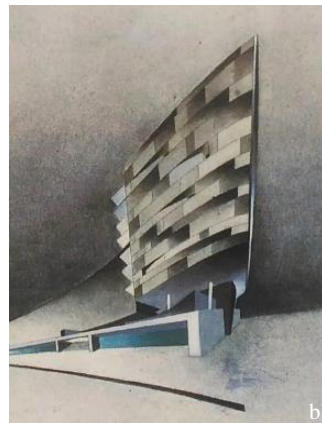


Fig. 143. Vitra Station drawing, Zaha Hadid.  
 Fig. 144. Vitra Station exterior construction.  
 Fig. 145. Vitra Station interior.  
 Fig. 146. a, b) paintings for IBA Housing by Zaha Hadid.  
 Fig. 147. Zaha Hadid, IBA Housing, Berlin, 1986-1993.

We see how she accomplished to diffuse the limits and attained a hybrid of these domains. Her first international project was The Peak (1982-1983) for a contest in Hong Kong. The work was a leisure club with representation based on the suprematist language that deviated from a habitual architecture, called attention and gained the first prize. As the result of a vast fame was included in the exhibition of *Deconstructivist Architecture*.

One of her first build constructions were her paintings were transformed in architecture is *The Vitra Fire Station* (1990-1993) in Weil am Rhein, Germany. Its angular design that seems in motion was composed by a series of intersecting and stratified geometrical planes of reinforced concrete slabs, and with windows incorporated into them, its narrow and long structure achieved a sense of motion by the vertical lines that are inclined at diverse angles. The architectural details are elementary, doors without frames, no light fittings just fluorescent lines, some features are even omitted like the finishing material for the floor. Interior just like exterior is of interconnected planes and sharp cuts that give the sensation of mobility and infinity. Hoenheim-Nord Terminus (1998-201) in Strasbourg, a transport station of electric trams and a big parking lot. Its appearance was akin to that of Vitra, the composition from a perspective or aerial view seems to look more like a painting than architecture because of the flat roof, the contrasting colors of dark grey and white of ground.

Another building project is IBA Housing (1986-1993) in Berlin. The sculpted tower coated with shining metal sheets of miscellaneous dimensions, incorporate a social housing project. The eight-story building have commerce on lower floors, and upper floors have dwellings, and the roof is used as a garden and a playground for children. In 2006 at Guggenheim in New York, was held an exhibition with her works, from the beginning of the legendary museum ramp were exposed paintings and going up followed her projects, so for the visitor was created this perspective of immersion from painting to architecture. She also made sculptural furniture, installations in landscape, museum and private houses. For instance, one of her last installations was in New York in 2008, and these were works that sought *to explore the relation between architecture and art*<sup>238</sup> for a redefinition of the space.

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<sup>238</sup> Philip Jodidio, *Hadid: complete works 1979-2009*. Koln: Taschen, 2009, p. 573.

Some *Deconstruction* architects didn't think though about the affiliation with Derrida, but Bernard Tschumi and Peter Eisenman are the ones presenting an explicit Derridean connection. Eisenman in his works gave a concentration on the shift of architectural approach and general aesthetic no longer deductive to rationalism. For him was fundamental the idea to produce work representing the *zeitgeist*,<sup>239</sup> and he aspired to other order, and language. The original intentions can be observed from his previous residential projects, for instance, the House III (earlier mentioned), House VII (1972-1975), House X (1975). In these constructions, he maintained the general idea of the cube as general form but submitted it to transfigurations, by rotations, intersections, and even if they may seem chaotic demonstrate the capacity of functionality in these diverse systems of organization. In Nunotani Office building (1990-1991), Tokyo for external surface he designed distorted windows and through them can be seen the horizontal structure generating a tectonic instability for a stable form.

His architectural language of total abstraction also takes as a reference the advice from by the emerging conceptual art. For example, his cardboard architecture, like private houses based on a grid, but especially the *Wexner Center for the Visual Arts* (1983-1989) in Ohio, that consist of a new building within two existing, where beside its de-composing form, between the façades is inserted a false intersecting grid that serves as a corridor, and these syntaxes evoke the conceptual nature and white color similar with by Sol Lewitt sculptural configurations, like the *Series A* (1967), Cubic construction (1971) or others geometric sculpture.

*Parc de la Villette* (1979-1998) in Paris by Tschumi in collaboration with Derrida, is one of the most substantial work of Deconstruction based on a sophisticated program. The composition based on a system of lines have walkways, bridges, buildings, gardens. Also, a series of thirty-five follies painted in bright red are striking constructions with different deconstruction representations, they further are arranged on a grid that creates the organization of the park; all components are intended for activity and experience.

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<sup>239</sup> *Zeitgeist* is a German word that signify the spirit of the epoch, or the common characteristics of a certain period of time and was introduce by diverse German romantic writers.

## **4. NEW AFFINITIES**

*In pursuit of a complete unity between art and architecture of our days*





## NEW AFFINITIES OF RECENT TIMES

*“Today, architecture and art mutually observe each other with curiosity and skepticism, while they try out different form of coexistence, (...).”*<sup>240</sup>

As the 21<sup>st</sup> century forge ahead, it becomes evident that there is no clear orientation to any predominant style in architectural panorama. In our days the common theme is a pluralistic diversity, we assist at varied approaches and ambitions that generate new vision and strategies in the architectural works and environments. If some architects opt for minimalist tendencies of “reduced and silent box,”<sup>241</sup> others are searching a contrast to the retrospective consideration of simple forms as well appearances. Most architects develop a representative language that can distinguish their identity from others. The new generation incorporates in their works the products and technologies of the recent time. If technologies, innovations, and industries help in finding new, more economical, sustainable solutions that would improve our living, making it better and more comfortable, also through computers have made possible artistic concepts and manufacturing that would have been considered impossible not long ago.

Here we can refer to chances most distinctive and applied in last periods, like diverse machine processes that permit to achieve artistic treatment of rigid (concrete, glass, steel, cor-ten, etc.) or soft (rubber, silicon etc.) materials that can represent not just image or appearance but also functionality and ability to establish sensitive and perceptive experiences; as well possibilities of construction that can help to represent plasticity or other artistic intentions.

As well in works of some architects still can be found influences derived from the trends of the 20<sup>th</sup> century vanguard movements, like Frank Gehry, Peter Eisenman, Bernard Tschumi, Rem Koolhaas, Daniel Libeskind, Herzog & de Meuron, Will Alsop (b. 1947), Peter Cook or others. And many of them in a big part of their records disclose a union of art and architecture.

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<sup>240</sup> Luis Fernández-Galiano, *Woven Texts*, in Rosado António de Campos, Benitez Elba, *op.cit.*, p.150.

<sup>241</sup> Building simple, doesn't mean that architect have an easier or simple way of development, as well this is a complex research, extensive amount of ideas that just in its conclusion represents simplicity.

In present days also are highlighted collaborations between architects and artists, in the internationally scene as well in Portugal. In known examples, most of the times they work in tandem and accomplish significant duets that dissolve in single works. Artists are not called just to fill a space, but from the early stages they work together and fuse their skills and interpretative codes in pursuit of esthetical, conceptual and spatial questions. From these combinations where the final product is a complete unification of disciplines, results in curious works with the unique character.

Beside permanent buildings that we all know, these combination is largely reproduced in temporary constructions in places or spaces where people could interact with these works. Most of them representing pavilions (just like in 20<sup>th</sup> century), installations but also exhibitions that are a great opportunity to bring together this field that are more and more alienated.

For instance, with these preoccupations recently in 2016 at the Milan Triennale was created a cultural project entitled *Arch and Art* that gathered five groups, each one with an architect and an Italian artist to design five pavilions in the park with the scope of demonstrating “contamination” between them. Mainly it was a process of convergence where architecture welcomed art, and art was inspired by architectural form. These groups were:

<i>Architects</i>		<i>Artists</i>
Eduardo Souto de Moura	————	Jannis Kounellis
David Chipperfield	————	Michelangelo
Michele De Lucchi	————	Pistoletto
Hans F. Kollhoff	————	Enzo Cucchi
Francesco Venezia	————	Mimmo Paladino



Recently an exhibition that explored the field's connections was *Endless House: Intersections of Art and Architecture* in 2016 at MOMA, New York. Its idea departed from an unrealized project Endless House by Frederick Kiesler (1890-1965) and his belief in unity. The focus of the exhibition was based on houses, how artists used them to explores diverse topics and how architects used houses to extend their design abilities and to stir architecture in new routes, exemplified by various drawings, photographs, house models, etc.,

Another exhibition of some time ago in Lisbon entitled *Co-Laborations: Architects /Artists*, (1999) also intended to make visible the versatile relations between them. This presentation included five projects of buildings as well public spaces that conferred alternative ideas of work. The collaborations were:


	<i>Architects</i>		<i>Artists</i>
	Herzog & de Meuron	—————	Thomas Ruff
	Serveis D'Arquitectura	—————	Francesc Torres Michele
	Kiessler & Partner	—————	Dan Flavin
	Paul Robbrecht & Hilde D.	—————	Cristina Iglesias
	João Gomes da Silva	—————	Fernanda Fragateiro



Fig. 148. *Jardim das Ondas* by João Gomes da Silva and Fernanda Fragateiro, 1999.

In October of 2000 followed the exposition *Contaminantes/Comunicantes: Ten artists/Ten architects* with ideas and content that aspired to stir the local cultural world. As was mentioned in the catalog, this event intended to be “*a significant step towards the re-launching of the new collaborations between the arts and the architecture.*”<sup>242</sup> Contrary to other artistic meetings, where each work of architect and artists were presented individually in one place.



*Architects:* ARX, José Adrião+Pedro Pacheco, Rita Amado, João Álvaro Rocha, Richardo Bak Gordon, Patrícia Chorão Ramalho, João Pedro Falcão, Pedro Mendes, João Santa-Iria, Cristina Veríssimo+Diogo Burnay.



*Artists:* Leonor Antunes, Fernando Brito, Filipa César, Alexandra Estrela, Didier Fiuza Faustino, João Fonte Santa, Miguel Leal, Miguel Palma, Miguel Soares, João Tabarra.

<sup>242</sup> Leopoldo Criner, in Paulo Mendes, Pedro Gadanho, [et.al.] *Contaminantes/comunicantes: 10 artistas + 10 arquitectos*. Lisboa: OA-SRS, 2000, p. 3.

Many contemporary artists just like in the second part of the 20th century continue to recourse to architecture as an inspiration, much creating “architectural projects,” they work with volume, space, or even create spaces. One of the international exhibitions that explore this kind of interchanges between domains is *Artists and Architecture: Variable Dimensions*. First, this exhibition started in Paris in 2015, and then followed Lisbon in 2017; it intended to bring up multiple interpretations of art interrelated with architecture.

As well a new range of artists that opt to disclose their creativity through digital realms, computer software, electronic surfaces or mapping videos they found their “white canvas” in building skin or landscape. And through these new virtual images are created temporary expressive dialogues.

Of course, many other examples always are created to improve our mood and the places to which we belong. The following case studies will be based on permanent buildings of latterly times from international and especially Portuguese background, elucidating the limitless nature and unique collaborations that occur in both private and public constructions. As well, will be evidenced consecrated artists whose works blend with space, compose space, or even represent small constructions.

*Their art and architecture blend into a resurrected cultural idiom, a phenomenon that deserves to be investigated and which sets a precedent for others to follow.*<sup>243</sup>

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<sup>243</sup> Ivan Margolius, *Introduction*, in Helen Castle, *op.cit.*, p. 9.

## **5. DISTINCTIVE CONFLUENCIES**

*Some case studies that regained a dialogue between art and architecture.*



## INTERNATIONAL CASE STUDIES

**HERZOG & DE MEURON** Multiple points of view we find in international context, perhaps one of the known architectural offices that mostly record affinities with an artistic dimension is the partnership *Herzog & de Meuron*. Two notable architects Jacques Herzog and Pierre de Meuron both born in 1950 in Basel, Switzerland that studied together at Swiss Federal Technical University in Zurich founded their common architectural office in 1978, and from early stages showed their interest in art. Even before establishing their mutual office, by their invitation they collaborated with artist Joseph Beuys at the carnival of 1978 in their native city. At this show, Beuys created a performance, felt suits for around sixty people, and reproduced copper and iron elements from other his work earlier presented in Basel. The young architects made golden masks, and for three days they all performed in a parade around the city. This first collaboration with an artist was *a key event influenced their work as architects*.<sup>244</sup> As well Herzog exhibited as an artist in galleries till 1986.

In their repertoire, we find collaboration along years with varied artists. One of the cooperation from the beginning of the project is with the photographer Thomas Ruff (b.1958) for the new library of the *Eberswalde Technical School* (1994-1999), Germany. The building is a neutral architecture with a simple rectangular form that accentuates the iconographic representation by the artist. Thomas Ruff used the sequence of prefabricated panels in screen printed glass and stamped concrete, the basis of the prints are photos about culture, history, politics, and science that he collected since 1981 in his diary of newspaper cuttings. By photos transparency and nuance, the difference between materials seems to disappear, and *allows the work of the artist and architect to be unified in an object where both are fused together*.<sup>245</sup>

In *Ricola Production and Storage Building* (1992-1993) in France architects as well employ a simple general design but for central façade was used a single image that was multiplied and acted as *Bekleidung*.

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<sup>244</sup> Gerhard Mack, *Herzog & de Meuron: 1978-1988*. trans. Katja Steiner, Bruce Almberg, Basel. Birkhäuser, 1997, p. 7.

<sup>245</sup> Christian Bjone, *op.cit.*, p. 171

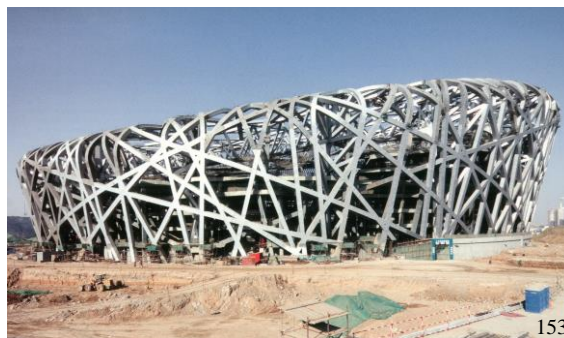
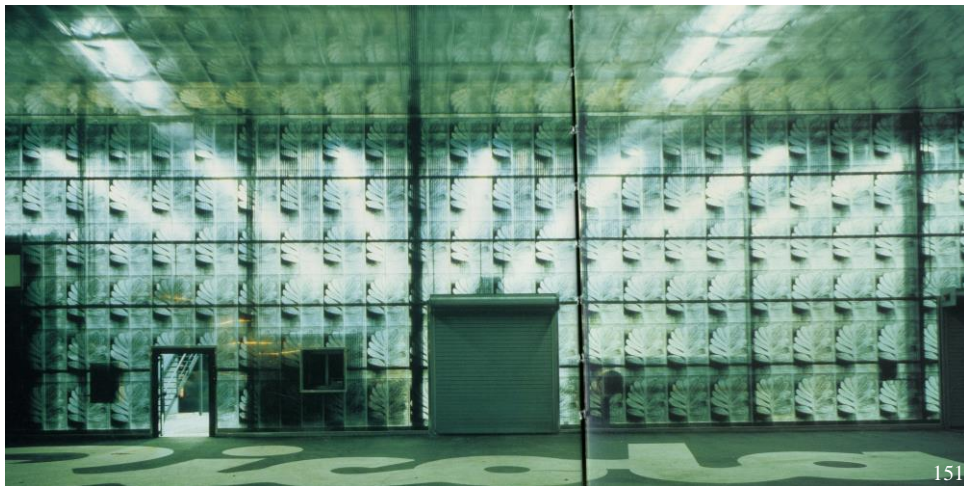


Fig. 149. University Library façade detail in concrete and glass.

Fig. 150. Laban dance center, Herzog & de Meuron.

Fig. 151. Ricola, Herzog & de Meuron.

Fig. 152. Olafur Eliasson, sculpture at Fünf Höfe.

Fig. 153. Herzog & de Meuron, National Stadium for the Olympic Games in Beijing.



It represents a palm leaf recorded by German photographer Karl Blossfeldt (1865-1932) that was dedicated to photos of nature and especially macros. The palm leaf was imprinted on polycarbonate surface and offered transparent and opaque perceptions. In these two projects, and others Herzog & De Meuron *take in advance the repetition of images in a seriality that refers to the period of Pop Art, and its characteristic aspect of the United States in the seventies.*<sup>246</sup>

In the project of a commercial gallery *Fünf Höfe* (literally five courts) for the Munich City Centre (1999-2003) that is a puzzled network of courtyards with cafés, restaurants, shopping, as to make these public spaces with a distinctive allure was invited three artists to work with space. These were Olafur Eliasson, Swiss painter Rémy Zaugg (1943-2005) and again Tomas Ruff. Zaugg contributed with wall paintings and texts in his specific style on diverse walls and floor panels, and the aerial photographs by Ruff were engraved on the floor plates. Olafur created a ten meters wide sphere wrapped by metal rings that are suspended in one of the courts, and in 2003 Herzog & de Meuron started the project for *National Stadium* for the Olympic Games in Beijing those external appearances of grid-like formations is much like Olafur sphere; in the project of this stadium architects also collaborated with Chinese artist Ai Weiwei (b. 1957) that provided art consultation, and later they continued to work with artist in other works like for an installation at Venice Architecture Biennale (2008) or more recently in other installation “Hansel & Gretel” in Park Avenue Armory building in New York.

In *Laban Dance Center* (1998-2003 located in London, within the process of the work architects invited the painter Michael Craig-Martin (b. 1941) to collaborate in the color project for interiors and for the façade for giving a fresh air on the part of the city that in those years were relatively in state of decay. Each interior compartment has a color, in the exterior pictorial façade are plunged the colors from the interior, forming some sequences of colors on polycarbonate skin, that is reflected in the water of Deptford Creek. Other examples, that shows how they transport to architecture their artistic skills are the *City of Flamenco* (2004- 2007) in Jerez, Spain, here the geometric architecture is gently dressed in walls of concrete that are partially perforated.

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<sup>246</sup> Maria Alexandra Salgado Ai Quintas, *op.cit.*, p. 25.



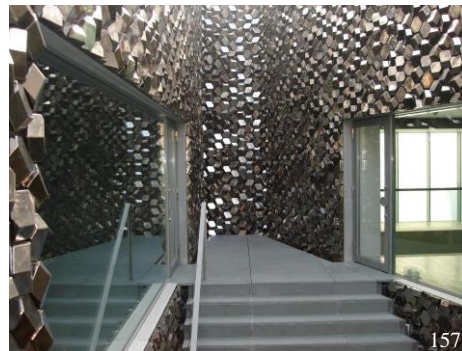
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Fig. 154. Tadao Ando, Chichu Art Museum, 2004, in the island of Naoshima, Japan.  
 Fig. 155. Time/Timeless/No Time by Walter de Maria at Chichu Art Museum.  
 Fig. 156. James Turrell Open Sky at Chichu Art Museum.  
 Fig. 157. Guest house Yu-un in Kyoto by Tadao Ando and Olafur Eliassons's tiles, 2006.

They were inspired by patterns of Arabic traditional ornamentation present in the history of the city, permitting a rich interlay of interior with exterior of the construction. In New York, for *Apartment Building* on Bond Street, they repeat this kind of abstract pattern for the aluminum gate at the main entrance of the block. There are many other examples of collaboration or not that change the usual view of the architecture. Herzog & de Meuron also find inspiration in the art world, especially in works of Andy Warhol, Donald Judd, Dan Graham, Matta-Clark, Mondrian, Gerhard Richter (b. 1932) and others those influences are translated into architecture under the form of repetition, the simplicity of volume, transparencies, subtractions, etc. They take advances from the technologies and transform materials in new artistic simulations with heterogeneous external appearance and tactile properties that define the medium. In their work is demonstrated a continuous research and methods in which *their confrontation with art opens up an approach to their architectural work that goes beyond*.<sup>247</sup>

#### TADAO ANDO

A Japanese architect Tadao Ando (b.1941) besides being characterized by works in a pure style mainly of concrete buildings, offers us rich borderland between architecture and art. One of these is *The Pulitzer Foundation for Arts* (2001) in St. Louise, United States, where Ando interacted with different artists, in interior stand a minimalist, flat sculpture *Blue-Black* by Ellsworth Kelly, in the water court a work by Scott Burton, and the courtyard is articulated by *Joe* a site-specific cor-ten sculpture of Richard Serra, when architect projected he took into account to find the best location of sculptures, and *the art very successfully becomes a detail of the architecture (...)*.<sup>248</sup>

The same interaction with the art is at Chichu Art Museum (2004) on the island of Naoshima, Japan. For the space of the museum, architect collaborated with artists that created specific and permanent artworks for some interiors. These are an installation *Time/Timeless/No Time* by Walter de Maria (1935-2013) the largest work that is a black and reflective stone sphere in the middle of a stepped room that also is surrounded by some golden elements. The next is a work by James Turrell *Open Sky* opened to the exterior. The building is inserted into an excavated land and is camouflaged into the green roof, here

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<sup>247</sup> Gerhard Mack, *op.cit.*, p. 7.

<sup>248</sup> Christian Bjone, *op.cit.*, p. 139.

nature, architecture, and art forms a whole union. In 2006 the art collector Takeo Obayashi asked Tadao Ando to design not a practical space but more artistic one. This guest house entitled *Yu-un* in Kyoto, Japan was designated for exhibitions and receiving guests, Obayashi wanted to bring art to a level of experience, where people could feel, see and know how art can combine with architecture. In the minimalist style of concrete and glass by Ando is enchanted by Olafur Eliassons's platinum glazed tiles on the walls of the triangular courtyard of the house. The shining tiles and their mirroring into glass creates a more comprehensive and dynamic space. In many buildings Ando chooses works by artists for his architecture, for instance at Banesse House (1992), Japan he incorporates a neon sculpture "100 Live or Die" (1984) by Bruce Nauman and photograph *Time Exposed* (1991), by Hiroshi Sugimoto. He even used copies of masterpieces like *The Last Supper*, (1498) by Leonardo da Vinci, *The Last Judgement* (1541) by Michelangelo and other and placed them into the exterior walls an artificial pond in Garden of Fine Arts (1994).

Based in London the architect and teacher Sam Jacob (b.1970) found a studio that works with architecture, design, art and curatorial project, and in many works of Sam Jacob Studio, there is an intercommunication between domains. Recently in October 2017 giving a conference *Strange Harvest: Adventures beyond Architecture* in Lisbon he presented works in which his studio explores the idea of architecture as an expanded field. As well various projects that are elaborated in collaboration with actual artists. When Jacob was part of FAT Architecture in collaboration with artist Grayson Perry (b. 1960) they designed for Living Architecture program of Alain de Botton the *House for Essex* (2015) near to London. The exterior of the building is finished with green and white tiles with diverse extruded motifs, and interior and doors are painted in rich colors and have diverse tapestries, sculptures, and paintings that relate a fictional personage is making from this house a fairytale. An unusual artistic project was accomplished in the refurbishment of *DKUK* (2016) that is a tiny hair salon (2m x 5m) in London, where its owner is both artist and hairdresser. The small interior was increased by a mirrors, also white walls and yellow accents. Here the client instead of usual looking in mirror they look at paintings, or other artistic media, that are exposed around and in front of them, so it acts as an art gallery and a salon. Also, beside constructions

**SAM JACOB**

the studio creates design objects, art prints, or installations and one of them is *London Grotto* in collaboration with artist Pablo Bronstein.

**MVRDV** Another architect that as well presented his work in Lisbon (November 2015) is Jacob van Rijs (b. 1964) one of the founders of MVRDV architectural office. In the design for the new Theater aan de Parade in Den Bosch, they selected the city's most known artwork The Garden of Earthly Delights, by Hieronymus Bosch that was born in that city in the 15th century, and used it as cover almost for all walls and floors, and the glass façade allows to see it also on the exterior. Recently finished in 2017 Jut Group Lecture Hall in Taipei of 240 meters square, for its interior walls, doors were used an all-encompassing tapestry from recycled threads by artist Alexandra Kehayoglou. In 2014 the office finished the project for the Market Hall in the historical center of Rotterdam, The Netherlands, a building designed as an arch form of 40 meters in height, under it is located the market and properly in the building are residential and offices. The exterior is executed merely in natural gray stone and with two giant façades of glass, which allows seeing from outside the artwork by Arno Coenen and Iris Roskam. The colorful mural labeled "Horn of Plenty" has a total area of 11.000 square meters and shows enlarged fruits, vegetables, flowers, fishes, seeds, and insects. It was divided in 4000 printed panels of 1.5 meters assembled on the inner surface of the vault, and became *the largest artwork*<sup>249</sup> on the architectural surface in the Netherlands.

**EMB** Another Market Hall with artistic treatment is *Santa Catarina* from Barcelona (2005) is a collaboration by EMBT architects with artist Toni Comella that designed the ceramic tiled roof in a vibrant pattern of rich colors inspired by fruits and vegetables. *Allowing the roof to express (...) a strong cultural connection to the city's history.*<sup>250</sup> It also gives a colorful panorama for the houses around the market. Over decades' ceramic tiles were used in various contexts on architectural limits, during the Muslim presence in the Iberian Peninsula. In Portugal was brought the art of oriental tradition- azulejo, being integrated into architectural spaces as artistic elements that conferred originality to each building. Azulejo at the final of 16th century begins to be

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<sup>249</sup> Luis Fernández-Galiano, *AV Monografías Monographs: MVRD Dream Works. n° 189-190*. Madrid, Arquitectura Viva SL, 2016, p.76.

<sup>250</sup> Martin Bechthold, [et.al.] *Ceramic Material Systems*. Basel: Birkhäuser, 2015, p. 100.



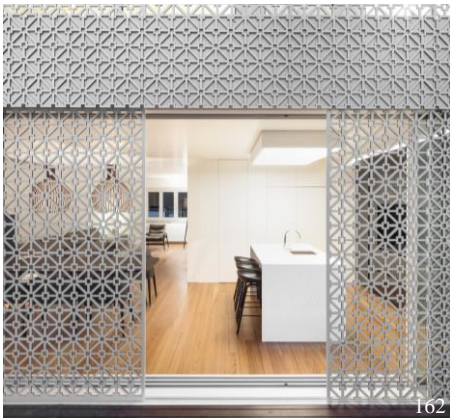


Fig. 158. Market Hall, Rotterdam. Exterior view by MVRD.  
 Fig. 159. Market Hall, Rotterdam. Interior view of artwork by Arno Coenen and Iris Roskam.  
 Fig. 160. Exterior Santa Catarina Market Hall, Barcelona, by EMBT architects.  
 Fig. 161. Roof (detail) by artist Toni Comella Santa Catarina Market Hall, Barcelona.  
 Fig. 162. João Tiago Aguiar house in Restelo, Lisbon, 2016.  
 Fig. 163. Casa da Música by OMA, in Oporto, 2005

fabricated in large scale by artifice in the pottery of Lisbon. In the 17<sup>th</sup> century was borrowed patterns from the tapestry, the 18<sup>th</sup> century was abundant with baroque influences, and next centuries were followed by art nouveau and art deco thematic.<sup>251</sup> Till today this tradition is preserved and rehabilitated in old buildings and reinterpreted in new ones.

- JOÃO TIAGO AGUIAR** João Tiago Aguiar (b. 1973) in rehabilitation project of Restelo House (2016) in Lisbon, reinterpreted the *azulejos*; they redesigned the back façade of the house, by opening a series of windows with shutters composed of a pattern inspired by traditional Portuguese tiles. In their project for the
- MAVC** restaurant LOCO (2015) in Lisbon they collaborate with Maria Ana Vasco Costa a Portuguese architect that left the main occupation as architect to work with art, and in this case combining her ceramic works in interior or exterior of architecture. For LOCO she created three-dimensional white tiles that covered an entire wall. Vasco Costa is giving a new shape to traditional azulejo with diverse three-dimensional configuration in diverse colors. She already has other collaborations with architects, for instance with architect Pedro Falé Balancho in the façade on Travessa das Almas (2015) in Lisbon, flat and extruded tiles in a form of rhomb and a soft yellow color; other façade on Rua Presidente Arriaga (2017), Lisbon for housing by STC arquitectos, and others.
- OMA** Casa da Musica in Oporto (2005) by Rem Koolhaas and Ellen van Loon, is a recent building in which in some interiors are used tiles, like patterns of colors but also one room is covered with traditional hand-painted tiles picturing a pastoral scene in a typical cobalt blue nuance. More by Rem Koolhaas, the Garage Museum (2015) in Moscow is a renovation project of the 1960s pavilion, here carefully were preserved the structure, and the original Soviet era elements like brick, decorative mosaic an element widespread in all area of the former Soviet Union, and a large anonymous socialist mural, combined with a new translucent polycarbonate façade that connect the pavilion's interior with the park. A lot of artists besides collaborations they individually form a strong relationship with architecture, making diverse typologies of works, that can be related (*Kunst am bau*) to architecture or not because those cannot be separated from the building or landscape, as well they

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<sup>251</sup> Maria Alexandra Salgado Ai Quintas, *op.cit.*, p.70.

create spaces where people can enter and relinquish different concepts of spatiality. Already mentioned Olafur Eliason that collaborated with architects also create diverse works that involve the spectator in art. His *Your Rainbow Panorama* (2006-2011) is a 360-degree walkway space on the rectangular roof of Aarhus Art Museum (ARoS) in Denmark. The permanent construction is made of colored glass and the space created by artist offer to the visitor possibility to emerge in a pictorial interior and to see the city in all tonalities of the spectrum. Another Eliason work that generates a specific atmosphere in the architectural space is his installation *The Weather Project* (2003-2004) at the Tate Modern in London, is a work that combined architectural space and nature, he hanged in the main turbine hall a semicircular form with many mono-frequency lamps and the ceiling covered by mirrors gave the sensation of the round setting sun, his artwork transformed the perception of the space. Another his cooperation with an architect is in the project of *Harpa Reykjavik Concert Hall and Conference Centre* (2007-2011) in the capital of Iceland, he designed the entire façade of the building by Henning Larsen Architects. The geometric façade is made of special designed quasi-glass blocks of twelve-sided polyhedrons with rhomboidal and hexagonal faces, many of them incorporate colors filters creating kaleidoscopically image.

The American sculptor James Turrell since the mid-1960s as well is interested in physical space but also in natural or artificial light and perception in the creation of his artworks. His *Skyspaces* (over eighty) in diverse locations are of two types integrated in architecture or as independent constructions, they consist of geometric chamber most of them lighted by colored artificial light in the interior, and in the ceiling, there is an aperture (that repeat the form of the space) open to the sky. The visitor can enter the space, sit in the places prepared to emerge in the perceptions of the space. Like many artists of the last decades of the 20th century he also settled an artwork in the desert, this is *Roden Carter* (1977) located in Arizona, the USA is his lifetime project. Since 1970 from the acquisition of the land this plan was developed over many years. Turrell transformed an extinct cone volcano in a natural observatory and artwork, a series of underground galleries and tunnels as “sensing spaces” that goes into the volcano itself compose the work. A project in which the observer can perceive and immerse in surrounding nature and silence.

## JAMES TURRELL



## PORTUGUESE CASE STUDIES

In Portuguese background as well, there is a diversity of architects and artists that through myriad manners create a dialogue between art and architecture.

**FSSMG** The architectural atelier FSSMGM Architects composed of Fernando Sanchez Salvador and Margarida Grácio Nunes in diverse projects collaborated with local artists. In the rehabilitation project of old coaches' space of Pena Palace (1989-2000) in the historical city of Sintra that consisted of a new program with restaurant and a shop architects cooperated with artist Pedro Proença that made abstract drawings of the glass panels that divided the space. In the design project for the Hotel Altis Belém & Spa (2005-2009) in Lisbon was created a concept for each room, based on the theme of the exotic landscape which the Portuguese diaspora would encounter on their travels around the world, so each compartment characterizes an individual city and have a specific color and design on the wall in front of the bed. The restaurant as well have printed panels that welcome the visitors, in the cafeteria door is used screen printed glass with a specific graphics drawing, and the façade is coated with a white metal panel representing abstract vertical and wavy lines reminding the waves of the adjacent river.

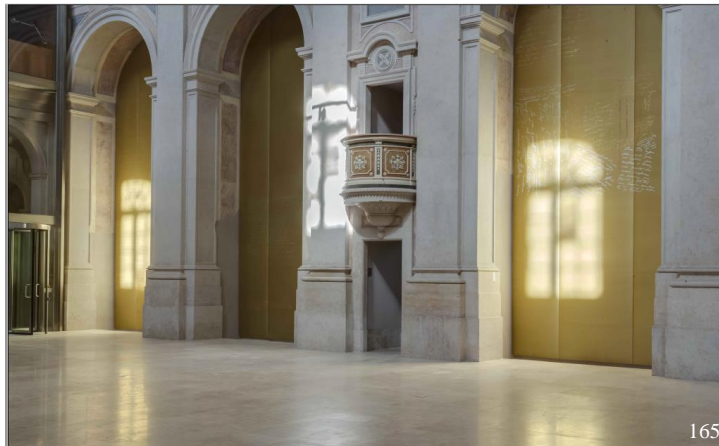
**CARRILHO DA GRAÇA** The architect João Luis Carrilho da Graça, for example, have diverse collaborations with the artist Julião Sarmiento (b. 1948) recently (September 2017) they two held a conference in Oporto at the Serralves Museum of Contemporary Art about the collaboration of architecture with art. In the ongoing project by Carrilho da Graça of *Portuguese Investment Bank Headquarters* started in 2015, that consist in a renewal of an existing building located in the historical center of Lisbon Baixa Pombalina. In the typical Lisbon interior patio that is narrow and straight was used glass surfaces to expand the perception of the space. And a long reflecting pool that is a subtle hint at the Tagus estuary that once flooded this part of the city.



164 a



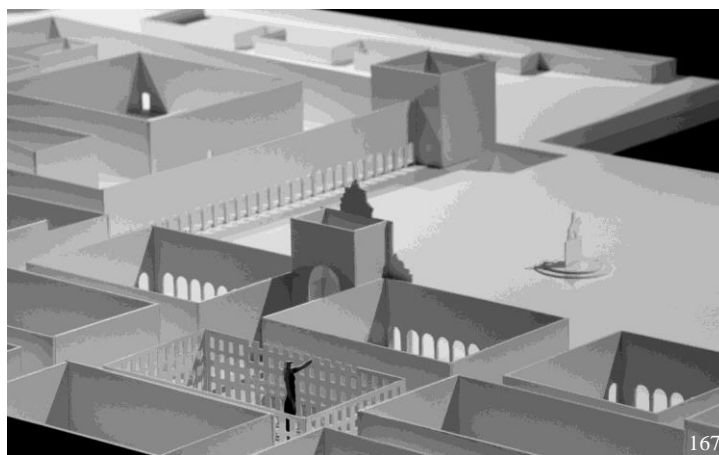
b



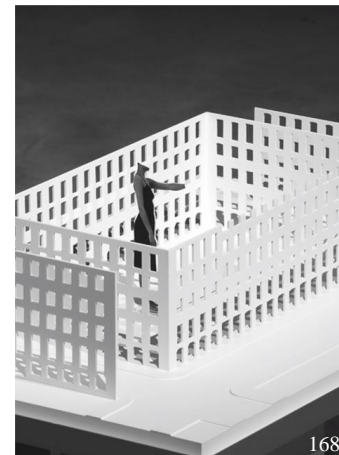
165



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Fig. 164. a), b) Fernanda Fragateiro painting the panel for *Banco de Portugal* head office, 2012.  
 Fig. 165. Banco de Portugal head office interior, 2012, with finished curtains by F. Fragateiro.  
 Fig. 166. Banco de Portugal interior, 2017.  
 Fig. 167. Carrilho da Graça, Portuguese Investment Bank Headquarters started in 2015, (model)  
 Fig. 168. Sculpture by Julião Sarmiento in Bank Headquarters by Carrilho da Graça.

And in the pool is positioned a large-scale (same as the high of the building) sculpture by Julião Sarmento representing the photographic image of a woman. The sculpture creates a sharp jump in scale.<sup>252</sup>

**PEDRO CALAPEZ** The artist Pedro Calapez (b. 1953) beside colorful and abstract paintings, he also has to his records an extensive collaboration with architects. All works have an apart originality, for instance at the invitation of architect Chuva Gomes he designed an abstract pattern on the glass façade of the *Public school* in Viseu (2010) the pattern has an aesthetic purpose but also functional, protecting the interior from the strong Portuguese daylight. The other façade was for the *Hotel Tivoli* in Vilamoura (2007) here architect first-time experiment with concrete panels. For the panels that were integrated into the upper part of the façade like the idea of antique friezes he designed abstract forms of plants and architecture and selected for the concrete a soft yellow color. In Fátima for *Santíssima Trindade* church (2007) also created panels this time in bronze, with motifs from the history of art, here in the same language as panels were made the central door with a pattern in bas-relief representing a religious scene.

The architect Nuno Mateus (b. 1961) from ARX architectural office in the process of rehabilitation of the Nossa Senhora das Neves chapel (2005) located in Ilhavo invited him to create paintings on aluminum panels for the interior. The artist created a colorful central painting “Coroa de Espinhos” and corner paintings for the altar that are in contrast with the white walls of the interior forming a different view on a common aspect of the traditional simple church and a dialog of the present with the past. A work of Calapez (1998) in urban context was for the Expo 98, here an abstract drawing presenting lines, pieces of branches, of doors, stairs, evocations of interior spaces, was incorporated in the street pavement located at the south entrance of the Expo, made of popular Portuguese *calçada* in two natural contrasting colors, white and grey.

**PEDRO PROENÇA** Very close to this work there is another drawing on the pavement by artist Pedro Proença (b. 1962) entitled *Monstros Marinhos* to represent sea figures that connect with the near Oceanarium and with Tagus river of Lisbon.

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<sup>252</sup> Gio Ponti, Domus: Rivista Mensile di Architettura Arredamento Arte. n° 1003, Milano, (june 2016), p. 32.

As Expo was a new area of expansion and development diverse artworks **FERNANDA FRAGATEIRO** such as sculptures, art walls, and others were made for this new place of the city. Work by Fernanda Fragateiro (b. 1962) "*Jardim das Ondas*" also for the Expo 98 was done in collaboration with architect João Gomes da Silva (b. 1962), and in this work, was a dialogue landscape architecture and fine arts. It was a park for the visitors of the World Exhibition of 1998; grass covered the whole area of the park with diverse three-dimensional forms that were inspired by the volume and rhythm of the making and breaking of waves. In 2016 the Jardim das Ondas has been rehabilitated.

A recent collaboration by Fernanda Fragateiro was with architects Gonalo Byrne (b. 1941) and Joo Pedro Falco de Campos (b. 1961) in the refurbishment of old church of St. Julio transformed in *Banco de Portugal* head office (2007-2012) in which also is installed the Museum of Money in Baixa Pombalina, Lisbon. The project included diverse fields of knowledge but as well the plastic arts. Fragateiro made the artistic panels and silk curtains for antique side chapels, their gold nuance is in contrast with the ambient of natural color of bright marble. On the panels artist also painted some excerpts from writings of Portuguese famous poet Fernando Pessoa (1888-1935).

An architectural project by her in *Box to keep the void* (2005) was a commission by the Educational Service of the Viriato Theater, in Viseu, to create a work that through children to communicate with a closed community and not very interested in contemporary art. The Box is a place where children can coexist with others by the possibility to entrance the sculpture and also to use it as a performative device in which diverse portions constantly can be transformed creating different space. In this project, a sculpture is reinterpreted with the help of architectural means.

## **6. FINAL CONSIDERATIONS**



Le Corbusier told once that architecture is a matter of relationships, and this research was namely based on the relationship of architecture with art.

Art and architecture today are two major independent fields, in this work was searched their common paths, their encounters and dialogues that were formed between them over time.

Through this study was clearly persuaded that since always artistic expressions were essentials of existence, as well indispensable representation of periods through which we can distinguish people's ideas aspirations and evolutions. And first of all this expressions and representations were manifested in art and architecture.

In this work was compelled a profound reflection about confluence among architecture painting and sculpture. Mainly focused on the new raised artistic movements throughout the 20<sup>th</sup> century, and their distinct proposals of integration art within the built environment. Right from the beginning of the century in history of both fields through new aspiration and revolutionary strategies was prepared a tabula rasa, in which artists and architects started to write a new history.

From the first years of the 20<sup>th</sup> century appeared new movements in art and architecture and most of them intersected in thinking concerns and representation. Cubism was at the base of all movements and throughout all century was much appreciated its contribution to following movements. Near to Cubism also were Expressionism, and Futurism. From 1917 in Europe started De Stijl characterized by a strong geometry, first it was encountered in paintings, and its new aesthetic concepts, colors, balance and even asymmetry from the visual art, were remarkable transported into architecture. The same idea was employed in Russian panorama after the Revolution of 1917, namely in the context of Russian Avant-Garde.

In first part of the century also were many examples of architects which individually developed this idea of synergy between art and architecture. and transmitting to other. This could be simply through their work but also through many lectures, conferences and writings. Le Corbusier and Josep Lluís Sert are two great examples in this sense, but also another.

Just like at the beginning of the century were new visions, in the second part again started a novel story. It was progressed a regeneration in which were introduced new definitions based on experiences of the integral environment. Even more in this new stage art entered in architectural space under unexpected ideas, and most of them used to redraw the boundaries between the visual arts and contemporary architecture.

The proximity of these fields turns evident along all centuries. And each movement had its apart originality, along with its building processes that shows us the strong relation of artistic experiences homogenized with architecture. Likewise, the history of architecture clarifies that architects collaborated with artists directly or indirectly to create art for their buildings, or its respective masters had general knowledge of the three specialties. *“And with that dialogue the objects hopefully merge into a greater and complex whole.”*<sup>253</sup>

As to see this subject from another perspectives and views, to get closer to experiences, ideas and teamwork, was made a series of interviews, to artists and architects that are familiar to correlate the fields of art and architecture. Either in their process of work or final works. The selected ones as well have in their records collaborations, in which they concentrate on the artistic means of architecture.

Namely were interviewed, four people. These are the artists Fernanda Fragateiro, Pedro Calapez, Pedro Proença and the architect Fernando Sanchez Salvador, in which the respective architect worked with all of these artists in different formats.

In interviews, in various questions, there are multiple similarities, and this once more denotes the synergy between art and architecture, their continuous dialogue. Both artists and architects work with same tool mainly starting with drawing and finally with space. From interviews we understand that artists are interested in working with architects, first of all because most of the collaborations are successful but also, they involve a new thinking. In these ways, artists start to think bigger, think of large scale like in public works or

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<sup>253</sup> Christian Bjone, *op.cit.*, p.14



façades of buildings. They begin to integrate their work in existing contexts. Artists discover new materials, scales preoccupations. Architects as well are interested in working with artists because this can result in interesting experiments, sharing's of ideas, opinions, knowledge. Working with artists from the beginning of work is necessary to achieve a better result. Architecture is a join of many fields also there are many examples where artists become a fundamental component of the join.

- *A lot of times the artist's practice approaches the one of the architect. (Fernanda Fragateiro)*
- *I do not see art and architecture separate. (Pedro Calapez)*
- *Especially art gives an effective supplement to architecture. (Pedro Proença)*
- *Between art and architecture, there is a natural and fundamental convergence. (Fernando Sanchez Salvador)*

The separation of art and architecture has taken place just in relatively recent times, and it's not always possible to achieve this union because of other requirements that overflow artistic spirit and the accelerated time of today's life. But in International and Portuguese prospect we find architects of artist that work in both fields, with visual arts and architecture. Most of them convert this dialogue into significant and valuable and work, that could inscribe in the description of Le Corbusier: *"But suddenly you touch my heart, you do me good, I am happy, and I say: This is beautiful. That is architecture. Arts enters in."*<sup>254</sup>

And with such a fruitful and notable compatibility between arts and architecture which were explored here, it deserves continuity, to put forward new ideas and to investigate the new approaches, new views that would intertwine, blending to form a single, perfect whole.

*The Arts never die, their principles remain true for all time, because humanity is always the same.*<sup>255</sup>

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<sup>254</sup> Le Corbusier, *Towards a New Architecture*. 13<sup>th</sup> Edition. London: Architectural Press, 1989, p.153.

<sup>255</sup> Eugène Viollet-Le-Duc, *On Restorations*. London: Sampson Low, Marston Low, and Searle, 1875, p.9.



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## **ANNEXES**





## **ANNEX 1**

### **TRANSLATED INTERVIEWS**

#### **FERNANDA FRAGATEIRO**

*Interviewed in October 2017 with 10 questions via email.*

##### **Question 1**

In your work, we can see and feel the visual arts, which come into contact with urban reality (as, for example, in the case of gardens) or in architecture (namely in the recent collaboration with the architect João Pedro Falcão de Campos in the “Museu do Dinheiro”). What means for you the convergence or union between art and architecture?

A lot of times the artist's practice approaches the one of the architect especially in work in the public space, which usually involves a joined conversation with a community, or with a public institution. The sensation I have is that the architect is never alone, never thinks alone and this condition of permanent sharing interests me. The artist's work can be accomplished in a more solitary way. But the architect's work not so much!

##### **Q 2**

In your professional career, you have several collaborations with other architects. How do the opportunities for working together generally arise? By friendship with the architects, by their recognized notoriety, by straightforward order, by invitation or any other way?

One of the things that fascinate me most, and maybe that's why most of my friends are architects, is the open field where this discipline moves. There are an insatiability and an extended conversation, where many people of different knowledges fit. It's true that I became friends with the architects I've been collaborating with over time. Now, since they are my friends, it becomes natural my involvement in the projects they are developing. I don't always

perform visible interventions on these works. Many of the times my participation is merely looking at the project and discussing it and giving my critical opinion. Sometimes the roles are also reversed, and I take the initiative to invite architects to collaborate with me. This just happened on a project for a public garden in Lisbon, the Jardim Folha, designed for Santa Apolónia, by invitation of Câmara Municipal de Lisboa (CML), and where I was to invite the architect João Pedro Falcon de Campos to work with me, not only in the sculpture-garden but also in the surrounding public space.

### Q 3

In the collaborations that have taken place do you feel that you are given full freedom of creation or not as much as you might wish?

Drawing "Spaces of liberty" is in absolute continuity with what I want to do in urban space. If I were to state in a few words something of what I think I have understood about space, it is the possibility of experience and the opening of the awareness of freedom that is essential in every place: the 'right to time' and the 'right to space.'

### Q 4

In the catalog of the exhibition *Co-laborações: Arquitectos/Artistas*, the *Jardim das Ondas* (1998) is referred to as a project of collaboration that blurs all the boundaries that separate the artists from the architects. Does this happen only in the outcome or does it feel that it is part of the development process, in which the aforementioned separation borders tend to fade away?

In this specific case of *Jardim das Ondas*, it can be said that the collaboration took place during the project execution and not in the project design.

### Q 5

Based on your work, do you feel that the Union of art with the architecture (or the artist with the architect) is always successfully achieved? Or is it that sometimes and for different reasons, there are projects/collaborations that stay "in the drawer"?

Pure and hard collaboration is very rare. There are usually collaborations where the participation of each person involved is asymmetrical. However, they are always very interesting experiences. It is true that many projects remain to be implemented, or they drag themselves in time. But to think is already doing. Nothing gets lost completely. Thinking is already building. Thinking is always an action.

#### **Q 6**

Do you feel that collaborations with architects contribute to think on your work when you take-on the question about any new frontiers, ideas, possibilities or relationships?

I learned a lot from the architects with whom I work, in which the city is made in a non-linear way, and that results from the knowledge from different perspectives (nature, the construction, the culture and its revelation). I learned that nothing could be understood in a fragmented, but rather articulated way. I was taught to work on another scale, closer to the scale of architecture. I was also influenced in my way of representing, of drawing, of building models.

#### **Q 7**

With your vast experience in these fields, do you consider that collaborations between artists and architects are more frequent today or in the past?

The collaborations between artists and architects are very old and come from a long way, but the way these relations have been established has been altered. They evolve every day. I think that nowadays the artist is mobilized to think and is called to intervene in the construction of the world, to be part of multidisciplinary teams and often to be challenged to think of solutions to social or space problems. When the architect Manuel invited me to design a garden for Santa Apolónia, he presented to me the challenge as something very complicated, that only an artist could solve.

#### **Q 8**

Does your usual process of individual work have any method of research in architectural terms? That is, in your research, do you explore the

connection with space, materials, or even, with people's journey, experience, environment, light, or reflexes, among other values?

My research goes through a lot of reading. Often the research materials are incorporated or transformed into artwork. For a long time, I've collected architectural magazines: *Domus*, *Casabella*, *Habitare*, *L'Architecture d'Aujourd'hui*, etc., especially from the decades of 60-70, and which have served as great inspiration for my work.

#### **Q 9**

Do you feel that you are connected to some artistic movement or to particular cases of artists or architects that you feel are examples of reference in the development of your artistic proposals?

The modernist movement, modernist practices, both in art and in architecture interest me immensely. Schools like *Bauhaus*, or *Black Mountain College*, in the United States, are very interesting to me. But also, other projects developed in the decades of 60-70, as the project of "Ciudad Abierta" in Chile, where education has always been very connected to ways to live.

#### **Q 10**

Do you have authors, artists or theorists who consider relevant? Also, have some favorite works?

That would be a giant list. I have worked a lot from the works of female architects, artists or designers such as Eileen Gray, Lilly Reich, Lina Bo Bardi, Otti Berger, Clara Porset, Lygia Clark, among many others. Right now, I'm working from works by Alyson and Peter Smithson. As for books, one of my favorite books is George Perec's *Espèces d'Espaces*.

## PEDRO CALAPEZ

*Interviewed in October 2017 with 8 questions, at Pedro Calapez atelier in Lisbon.*

### Question 1

In your work, we can see and feel the visual arts, which come into contact with urban reality (at Expo 1998 or in the inner courtyard of a building in Caparica) and Architecture (several façades, interiors and in Santíssima Trindade church main doors and side panels). What does the convergence/union between Arts and Architecture mean to you?

My work, from the beginning, always had a very special relationship with the spectator and with the occupation of space. From the beginning, I was not only concerned with the way space was presented at different times, but I was also interested in the multiplicity of points of view. My concern was more about the representation of space than about building space, but some of my work began by constructing spaces where people circulated. On the other hand, the question of the visual field is also a spatial thing, which is the distance that we see things, and being by a wall or being too far from a wall gives us a different feeling. It was a natural thing when some architects suggested me to work with them. Somehow, I joined, because I also like that participation. I do not see art and architecture separate, but there is no doubt that most of the times architects are developing the space and they alone visualize the complete space. It is rare the situations where I am called at the beginning of the project to develop an idea, and this idea influences the space of architecture. I think when this is possible the situation is ideal, but there are autonomies that the architect has and that the artist has that can be combined. I also believe that it is interesting to maintain the autonomies because each has its way of doing things. Nowadays the work of the architect and the artist is very much a work of art. The dilution of the notion of architectural space as a very minimalist architecture is possible within a particular way of doing things.

The architect's job usually comes first. It is work with many people, many disciplines, and several different situations. The artist's work is a more isolated

and autonomous work in the studio and does not depend on certain circumstances (terrain decline, urbanism, the relationship with other spaces). The relation with the plastic artist usually arises from the architect. There are houses that have in the front a small piece of art in Lisbon because of law in which, the buildings from a particular volume had to apply a work of art. In general, the artist has a limited intervention and is the architect role to ask to develop specific interventions. I did a project with the architect Chuva Gomes at a school in Viseu in which we discussed the building and its localization and the initial idea of trees. I ended up making vegetal elements. As happened with other architects (Graça Dias) what I do is to point out a set of solutions and in following meetings, we fine-tune the best option. Not being an architect, a possibility was to work in an architecture studio to allow my participation from the start. The work is normally done at the beginning by the architect without the intervention of the artist.

## Q 2

In your professional course, you have several collaborations with architects. How do the opportunities arise in general to perform these collaborations? By friendship with the architects, by their already recognized notoriety, by simple order, invitation or any other forms?

Collaboration requires a budget. For several times the architects have no budget for arts, or simply budgets are used for design and interior design in the decorative part of the project. In the work of the Tivoli hotel in Algarve, I developed an interesting job that I had never done using molds together with a process of researching materials. Collaborations can arise not only out of friendship but also when there is the possibility and budget and the architect is interested and loves the artist' work. When we act together, there is a potential to animate the project as in the school work in which the Architect Silva Gomes thought that the drawings I made would be a visual enrichment. Although in other cases there are architects who themselves do the whole project. At the Porta Sul in Fátima, there was the possibility of drawing in such a way that it was very abstract from the ground and that as people climbed they could see the drawings at different distances, sides and different levels and only saw the whole project when they were standing up in the tower. This work also

combined a calçada Portuguesa (Portuguese stone sidewalk), and I needed to develop with the architecture cabinet a process to produce different designs from similar molds. In Caparica in collaboration with the architect Graça Dias, I also adapted and had to distort a drawing of a tree to adapt to two facades of the same building that took advantage of calçada Portuguesa in black limestone and white glazing.

### **Q 3**

In the collaborations that have taken place, do you feel that you are given full freedom of creation or not as much as you might wish?

I've had enough freedom, adjusting this freedom to situations. The architect can tell me that he likes more this drawing, or that the drawing should extend more one way, or use another color, as it happened for example as in the Tivoli Hotel in Vilamoura where the color of the surface of the colored concrete was discussed with a three color test. In this way, it was decided in the group what was the best option. I do not consider myself a confrontational artist and adapt and work in conjunction with the architectural offices.

### **Q 4**

In the various projects of collaborations, in the end, you refer to them like projects which dilute all the borders that separate the artists of the architects. Does this only happen in the final result or do you also feel that it is part of the development process, in which the lines of separation tend to fade?

In the school of Viseu and the Tivoli hotel, the integration is quite big. In the intervention of Olaias, there was some lack of communication which made the planning of my work somewhat difficult, since the initial situation was changed and later the framing of the other elements in that space. To work the architect's work must be very clear and pass that on to the artist for the artist to respond conveniently. I made several approaches with some more or less abstract designs for the Teatro de Almada, and I let the architect then choose which one he liked the most. I was surprised because I thought the architect liked something more general and abstract, but he preferred the situations that were more realistic. This shows that this contact is fundamental.

## **Q 5**

Based on your work, do you feel that the union of art and architecture (or of the artist with the architect) is always successfully achieved? Or is it sometimes that for different reasons there are projects/collaborations that stay "in the drawer"?

In Jerónimos adapted the drawings to the space of the Cloister, to St. Jerome, and the chosen color was in harmony with the frescoes of the ceiling. Withholding, nevertheless, my autonomy. I found a solution in continuity and relation with the historic building.

## **Q 6**

Do you feel that collaborations with architects contribute in a way to think about your work by leading you to wonder about any new frontiers, ideas, possibilities or relationships?

Yes, there are things I pick in architecture and use in drawings. In the 90s I made a series of designs called Jardins that are part of a mixture of interior and exterior images of modernist architecture, inspired in one case by Le Corbusier, Gropius, not for its functionality but for the visual aspect of the representation that he made with these spaces. I made another more complicated piece called Piso 0 at the Centro Galego de Arte Contemporânea in Santiago de Compostela where I chose the Siza Vieira building. I took the lines that overlapped of the collapse of all the floor plans of the building in a single plane. I then drew an undulating puzzle making a new map of the building that works by a discontinuity of colors and that maintains the intimate relation determined by the original form of the building. Other designs were made from classic architectural plants in which I use them in a very plastic way. I collected a short time ago several photographs of the Palladio architecture from Veneto to use as potential references in future work, even though references are far from their point of origin.



**Q 7**

With your vast experience in these fields, do you consider that collaborations between artists and architects were more frequent today or in the past?

I have a notion that this has always existed. In the Renaissance, there are artists who are simultaneously architects and who end up defining the architecture and making their paintings such as Michelangelo. Bernini was another architect and sculptor who developed the idea of total space and filling space as an idea of integration. And I think over the years the mix persisted, Le Corbusier, the multifaceted Frank Gehry. In some cases, such as in museums, the architect makes it difficult for artists to intervene by not agreeing to the works to be exhibited (Hans Hollein of the MMK in Frankfurt) or by designing rooms with shapes or dimensions difficult to fill with art (MAAT in Lisbon, Guggenheim in NY).

**Q 8**

Do you feel connected to some artistic, architectural movement or to particular cases of artists and architects that you feel are examples of reference in the development of your artistic proposals?

I developed a set of panels with golden rule ratio according to and the different dimensions that followed the mathematical series. I like a lot of different things. As a reference, I have modernist architecture and Art Deco architecture although these architectures do not use the profusion of colors that I use. I like Hans Hollein's Scarpa, Caffè Aubette intervention by Jean Arp and Theo van Doesburg, or even the controversial Richard Meier who designed the Frieder Burda Museum in Baden Baden. In my work, I develop the idea of a complete space using everything from baroque architecture to modernist architecture so that the viewer can be surrounded by this totality.

## **PEDRO PROENÇA**

*Interviewed in October 2017 with 9 questions, at Pedro Proença home in Lisbon.*

### **Question 1**

In your work, we can see and feel the visual arts, which come into contact with the urban reality (drawing for sidewalks in Expo) or in architecture (several murals with panels of tiles). What does the convergence/union between arts and architecture mean to you?

There is a basic discipline that is drawing, and drawing encompasses everything. As far as I know, I feel that architecture and art are integrated, a bit like Le Corbusier's perspective. I think especially art gives an effective supplement to architecture, I think that's basically it. One sees from the remotest antiquity that is fundamental, makes more company.

### **Q 2**

In your career, you already had several collaborations with architects. How do these collaborations generally appear? By friendship with the architects, by their already recognized notoriety, by simple ordering, invitation or by any other means?

The initiative always comes from the architect who wants to use my work; then I try to find solutions exactly as an architect client relation. An extra budget can also allow punctual collaborations.

### **Q 3**

In the collaborations that have taken place, do you feel that you are given total freedom of creation or not as much as you could wish for?

I do not remember many limitations. What usually exists are thematic and space-specific limitations.

**Q 4**

Several collaborative projects, once completed, are referred to as projects that dilute all frontiers that separate artists from architects. Does this only happen only in the final result or do you also feel that it is part of the development process, in which the lines of separation tend to fade?

I think there are times when there could be more entanglement regarding finding solutions between artists and architects. There may be suggestions for how to approach space or do a sort of brainstorm. I think in that aspect there could be more fun and more stimulating things as there were also artists and architects in the Renaissance who found unique solutions to things. Artists have a more subservient attitude towards architecture.

**Q 5**

Based on your work, do you feel that the union of art and architecture (or of the artist with the architect) is always successfully achieved? Or is it that, sometimes, for different reasons, there are projects/collaborations that stay "in the drawer"?

During some period 20 years ago, I wrote architectural theory. I also made drawings or architectural fantasies, and I like to think of architecture as alphabets. One of the things I do is to create computer alphabets and categorize architectural elements, such as windows, flowers, skirtings and then create assemblies as if architecture were an assembly space. In that sense, you could say that I would like to develop with an architect a kind of formal or almost formal laboratory.

**Q 6**

Do you feel that collaborations with architects contribute to thinking about your work by leading you to wonder about any new frontiers, ideas, possibilities or relationships?

Yes, I think it can happen although it has not usually happened, but I would very much like it to happen.

**Q 7**

With your vast experience in these fields, do you consider that collaborations between artists and architects were more frequent today or in the past?

There are periods in the past where collaborations would be more frequent as in the Renaissance. But today some architects have an artistic appetite, and sometimes show a desire to go into the design area, through drawing, because it's some kind of small architecture. I think nowadays there should be more opportunities for artists to experience space as there was briefly in the period of modernism. I would much appreciate if there was an innovative flow in architecture in that sense.

**Q 8**

You have worked in architecture offices such as Carrilho da Graça or Fernando Sanchez Salvador. Do you feel that collaborations with architects contribute to think on your work by leading you to wonder about any new frontiers, ideas, possibilities or relationships?

It is important for me to create a theoretical flow so that certain things can emerge and, if possible, share this with other people. I really like working with architects. One has an idea, the other develops that idea in a certain sense, and at one point we are doing completely different things, but we are working on lines that cross and diversify. Here we have one fundamental thing, which is enthusiasm because working alone is much sadder.

**Q 9**

With your vast experience in these fields, do you consider that collaborations between artists and architects were more frequent today or in the past?

I like a lot of people. I have few dislikes, and some people with whom I have a problem, they have things that I appreciate and sometimes envy.

## FERNANDO SANCHEZ SALVADOR

Interviewed in October 2017 with 7 questions, at Faculty of Architecture  
University of Lisbon.

### Question 1

In some of your work you use art in the project. What does the convergence/  
union between art and architecture mean to you?

Between art and architecture, there is a natural and fundamental convergence. Natural from the point of view of our formation, we live with artists in our academic phase of the course. In the Faculty of Fine Arts, I had plastic arts and architecture together, and therefore naturally that this training was physically in our hand. Our interest manifested itself early with our "compagnons de route" and we became friends in some cases and admirers in others. There has always been a closeness and a great curiosity to go along with the work of these artists, and this interest is also tainting the way we look at the world and the architecture we are developing in the circumstances we are developing.

### Q 2

In your career, you already had several collaborations with artists. How do these opportunities generally appear to perform such collaborations? By friendship with the artists, by their recognized notoriety, by simple order, recommendations, or by any other means?

This closeness exists as I said in the formations, but it does not even have specific age groups, it has to do with the nature of the work of the artists that we are observing, we have a naturally great curiosity about the national and international artistic work, to visit exhibitions, to visit places where this art is exposed or was produced, and of course that curiosity and this desire to know is useful and pleasant. I think art is what brings us almost to God, not in the religious sense, but in the almost absolute sense because art focuses on problems that everyday life has difficulty in characterizing to solve. The art moves, it is freed, and in fact, the great questions go through this ancestral necessity of the human being since the prehistory of expressing beyond the

most objective and necessary things of everyday use. So, we invite the artists we know personally, or by the works of art they have produced, and we think we have affinities with the current project we are developing, and we execute it together. Together right from the beginning because art does not come half way, or at the end of the path to fill indefinite or undecided areas. The artist is a fundamental component in how soon one focus on solving the problems of architecture each in their area. In a more human and universal point of view, there is a more natural and necessary convergence.

### **Q 3**

Based on your work, do you feel that the union of art and architecture (or of the artist with the architect) is always successfully achieved? Or is it sometimes that for different reasons there are projects/collaborations that stay "in the drawer"?

Sometimes there are projects stored in the drawer because they do not win the competitions, or that they do not accomplish under different circumstances. However, this work is done and has obtained good results and from our point of view satisfies us, it gives us a greater proximity with the artists and especially with the works of the artists. Some work results in experiences that for some reason did not go forward, but are suspended in time to wait for an opportunity in which they can come to materialize, and I believe that one day we will do, and we will try and see what results they are going to give.

### **Q 4**

Do collaborations with artists contribute to thinking differently in your work by leading you to question new frontiers, ideas, possibilities or relationships?

We do not have the concern of work being artistic, and we have the concern that the work influences communities and the people who will enjoy them. We work with huge teams, with many different formations (engineering and electrical engineering, designers, art historians), and each or each training area will often have its languages, and the difficulty is in decoding these languages. We set up common platforms naturally related to personal and artistic affinities

so that we can work together. The work of architecture is always a joint work of many different areas that intervene with varying degrees, but which all contribute, and it is necessary to work coherently and to achieve what is intended. As a rule, we have been able to take steps, and even if we do not complete them, we are willing to try different things or continue what there was not the time to do with some teams from various areas where we rely technically on their solutions and ethics.

#### **Q 5**

With your vast experience in these fields, do you consider that collaborations between artists and architects were more frequent today or in the past?

In the past collaborations were different from what they are today. Today the speed is much higher in all aspects, and the reflection time is much shorter, the conditions we live in, the choices we make, so that these affinities have to be often built between projects or between solutions. Projects, and not when we are solving them because there is no time for anything. These issues have to be seen before, and supported in readings, visits, and curiosities. In this aspect, architecture is much more than an office, and it is transformed especially for those who like, in the way of being, in the way of living.

#### **Q 6**

Each country has a traditional art, for example here in Portugal we can use the azulejo, but it can be reinterpreted and used in architecture. Do you think it's a way of preserving a country's culture?

It depends on how it is established. There are ancestral forms of work that develop specific techniques, which have to do with materials, originally from the region, materials that were close by, and develop these appropriate techniques with empirical knowledge that has passed from generation to generation. It is possible to re-establish the most popular root art or traditional art that contrasts with the more erudite art or formation, so that it does not suffocate, and can survive and maintain these traditions that always go by direct learning and that can be preserved. Often using certain types of materials

also draws attention to these materials and these techniques. In the case of azulejo, it is very reused in Lisbon, and that is becoming very uniform and massified the good thing is that using azulejo on the exterior of buildings will save maintenance. I would be far more appropriate, for example, for managing condominiums than painting but this is more anecdotal aspects of tile use. The tile varies a lot from season to season, and there are many studies, and there are even other types of tiles in other countries. The tile is not our characteristic. These traditional tools and techniques can be preserved to fit by making upgrades useful for the present. We live the present, we live the present day, so all is useful if we use in day to day living.

#### **Q 7**

Do you have any architectural or artistic movement or particular cases of artists or architects that you feel are examples of reference in the development of your proposals?

I have many movements, many architects, many works of architecture, and I deliberately do not follow or copy them, but as a kind of little lights that guide me, that satisfies me to the look at many times without having problems to solve. When we least expect it we use it because knowledge is not literal, it is not direct and often crosses the unconscious conscious, and we end up reporting on what we have seen and what we know, and the lesson of these works is indeed very important. I go to all eras, many of the works that I admire. Many times, I do not know who the authors are because they are lost in time. There are many architectural currents with which I identify more, and which are useful to us at least to reflect. I am thinking of the Modernism of Europe in the 20s and 30s, which is very optimistic, very positive about the way in which it tries to improve society and the inhabited space. Then with the wars, it was interrupted and lost many of these values, but I do not believe that modernism died completely. I have works of architects that I admire internationally and nationally as works of Andrea Palladio, Giuseppe Terragni, Adalberto Libera, Siza Vieira, Ben Herzog and many who inspire me in day by day basis.



## **ANNEX 2**

### **ORIGINAL INTERVIEWS**

#### **FERNANDA FRAGATEIRO**

*Entrevistada em outubro de 2017 com 10 perguntas por e-mail.*

##### **Pergunta 1**

No seu trabalho podemos ver e sentir as artes visuais, as quais entram em contacto com a realidade urbana (como por exemplo nos casos dos jardins) ou na arquitectura (nomeadamente na sua recente colaboração com o arquiteto João Pedro Falcão de Campos no Museu do Dinheiro). O que significa para si a convergência ou a união entre arte e arquitetura?

Muitas vezes a prática do artista aproxima-se da do arquiteto, sobretudo nos trabalhos no espaço público, que normalmente implicam uma conversa alargada com uma comunidade, ou com uma instituição pública. A sensação que eu tenho é que o arquiteto nunca está sozinho, nunca pensa sozinho e essa condição de permanente partilha interessa-me. O trabalho do artista pode ser realizado de forma mais solitária. Mas o trabalho do arquiteto nem tanto!

##### **P 2**

No seu percurso profissional conta com diversas colaborações com outros arquitetos. Como surgem em geral as oportunidades para trabalhar em conjunto? Por amizade com os arquitetos, pela sua reconhecida notoriedade, por simples encomenda, por convite ou por outras formas?

Uma das coisas que mais me fascina, e talvez por isso a maioria dos meus amigos são arquitetos, é o campo aberto em onde essa disciplina se move. Existe uma insaciabilidade e uma conversa alargada, onde cabem muitas pessoas de diferentes saberes. É verdade que me tornei amiga dos arquitetos com quem fui colaborando ao longo do tempo. Agora, visto serem meus amigos, torna-se natural o meu envolvimento nos projetos que estão a

desenvolver. Nem sempre realizo intervenções visíveis nesses trabalhos. Muitas das vezes a minha participação limita-se a olhar para o projeto e discutirlo, e dar a minha opinião crítica. Por vezes também se invertem os papéis, sendo eu a tomar a iniciativa em convidar arquitetos a colaborar comigo. Isso acaba de acontecer num projeto para um jardim público em Lisboa, o Jardim Folha, pensado para Santa Apolónia, por convite da CML, e onde fui eu a convidar o arquiteto João Pedro Falcão de Campos a trabalhar comigo, não só na escultura-jardim, mas também no espaço público envolvente.

### **P 3**

Nas colaborações que têm tido lugar, sente que lhe é dada liberdade total de criação ou não tanta quanto poderia desejar?

Desenhar “espaços de liberdade” está em absoluta continuidade com o que quero fazer no espaço urbano. Se tivesse de indicar em poucas palavras algo do que julgo ter compreendido sobre o espaço é a possibilidade da experiência e da abertura do pressentimento da liberdade que é essencial em cada lugar: o 'direito ao tempo' e o 'direito ao espaço'. Posto isto, a ideia de absoluta liberdade de criação é fundamental. Mas essa liberdade implica negociar com vários agentes, sobre a forma como vou manipular o espaço urbano, na sua tensão entre o interior e o exterior, o público e o privado, a propriedade e a ordem. Trabalhar entre público e privado, entre passado e futuro, entre antiguidade e contemporaneidade faz parte do meu trabalho como artista. Mas tudo isto dentro do campo da liberdade no qual a arte deve operar.

### **P 4**

No catálogo da exposição Co-laborações: Arquitectos/Artistas, o Jardim das Ondas (1998) é referido como um projeto de colaboração que dilui todas as fronteiras que separam os artistas dos arquitetos. Tal acontece só apenas no resultado final ou também sente que faz parte do processo de desenvolvimento, no qual as referidas fronteiras de separação tendem a atenuar-se?

Neste caso específico do jardim das Ondas, pode dizer-se que a colaboração aconteceu durante o projeto de execução e não no projeto de concepção.

**P 5**

Com base no seu trabalho, sente que a união da arte com a arquitetura (ou do artista com o arquiteto) é sempre obtida com sucesso? Ou será que, por vezes e por diferentes razões, há projetos/colaborações que ficam “na gaveta”?

A colaboração pura e dura é muito rara. Normalmente acontecem colaborações onde as participações de cada pessoa envolvida são assimétricas. No entanto são sempre experiências muito interessantes. É verdade que muitos projetos ficam por concretizar, ou arrastam-se no tempo. Mas pensar é já fazer. Nada se perde completamente. Pensar é já construir. Pensar é sempre uma ação.

**P 6**

Sente que as colaborações com arquitetos contribuem para refletir no seu próprio trabalho ao levarem-na a questionar-se sobre eventuais novas fronteiras, ideias, possibilidades ou relações?

Aprendi muito com os arquitetos com quem trabalho, em que a cidade é feita de forma não linear, e que resulta do conhecimento a partir de diferentes perspetivas (a Natureza, a Construção, a Cultura e a sua Revelação). Aprendi que nada pode ser entendido de forma fragmentada, mas sim articulada e também a trabalhar a uma outra escala, mais próxima da escala da arquitetura. Também fui influenciada na minha forma de representar, de desenhar, de construir maquetas.

**P 7**

Com a sua já vasta experiência nestes domínios, considera que são mais frequentes as colaborações entre artistas e arquitetos nos dias de hoje ou no passado?

As colaborações entre artistas e arquitetos são muito antigas e vêm de muito longe, mas tem sido alterada a forma como essas relações se estabelecem. Evoluem a cada dia. Penso que hoje em dia o artista é convocado a pensar e é chamado a intervir na construção do mundo, a fazer parte de equipas multidisciplinares e muitas vezes a ser desafiado a pensar em soluções para problemas sociais ou de espaço. Quando o arquiteto Manuel me convidou a

desenhar um jardim para Santa Apolónia, apresentou-me o desafio como algo muito complicado, que só um artista poderia resolver.

#### **P 8**

No seu processo habitual de trabalho individual tem algum método de pesquisa em termos arquitectónicos? Ou seja, na sua pesquisa explora a ligação com o espaço, os materiais, ou até, com o percurso das pessoas, a experiência, o ambiente, a luz, ou reflexos, entre outros valores?

A minha pesquisa passa muito pela leitura. Muitas vezes os materiais de pesquisa são incorporados ou transformados em obras de arte. Desde há muito tempo que coleciono revistas de arquitetura: Domus, Casabella, Habitat, L'Architecture d'Aujourd'hui, etc, sobretudo das décadas de 60 - 70, e que têm servido de grande inspiração para o meu trabalho.

#### **P 9**

Sente-se ligada a algum movimento artístico arquitectónico ou a casos particulares de artistas ou de arquitectos que sente constituírem exemplos de referência no desenvolvimento das suas propostas artísticas?

O movimento modernista, as práticas modernistas, quer na arte, quer na arquitetura interessam-me imenso. Escolas como a Bauhaus, ou a Black Mountain College, nos EUA, interessam-me muito. Mas também outros projectos desenvolvidos nas décadas de 60 - 70, como o projeto da “Ciudad Abierta”, no Chile, onde o ensino esteve sempre muito ligado a formas de viver.

#### **P 10**

Possui autores, artistas ou teóricos, que considere relevantes? Igualmente tem algumas obras preferidas?

Essa seria uma lista gigante. Tenho trabalhado muito a partir de obras de mulheres arquitetas, de artistas ou de designers como a Eileen Gray, a Lilly Reich, a Lina Bo Bardi, a Otti Berger, a Clara Porset, a Lygia Clark, entre muitas outras. Neste momento estou a trabalhar a partir de obras de Alyson e Peter Smithson. Relativamente a livros, um dos meus livros favoritos é Espèces d'Espaces do George Perec.

## **PEDRO CALAPEZ**

*Entrevistado em outubro de 2017 com 8 perguntas, no atelier do Pedro Calapez em Lisboa.*

### **Pergunta 1**

No seu trabalho podemos ver e sentir as artes visuais, as quais entram em contacto com a realidade urbana (como por exemplo na Expo 98 ou no pátio interior no edifício na Caparica) e com a arquitectura (várias fachadas, nos interiores, na igreja Santíssima Trindade (Mistérios do Rosário de Fátima usando Cast bronze in main doors and side pannels, Fátima 2007). O que significa para si a convergência/união entre as Artes e a Arquitectura?

O meu trabalho, desde o início, sempre teve uma relação muito especial com o espectador e com a ocupação do espaço. Desde o início não estava só preocupado como é que se apresentava o espaço em diferentes épocas, mas também me interessava a multiplicidade de pontos da vista. A minha preocupação era mais a representação do espaço do que estar a construir o espaço, mas também alguns dos meus trabalhos começaram por construir espaços onde as pessoas circulavam. Por outro lado, a questão do campo visual também é uma coisa espacial, que é a distancia que nós vemos as coisas, e estar junto a uma parede ou estar muito longe de uma parede dá-nos uma sensação diferente. Foi natural quando alguns arquitectos me sugeriram de trabalhar com eles de algum modo, eu aderi, porque aliás também gosto dessa participação.

Eu não vejo a arte e a arquitectura separadas, mas não há dúvida que na maior parte das vezes os arquitectos estão a desenvolver os espaços e eles próprios visualizam o espaço completo. São raras as situações em que eu sou chamado no princípio do projecto para desenvolver uma ideia e essa ideia influenciar o espaço da arquitectura. Eu acho que quando isso é possível a situação é ideal, mas há autonomias que o arquitecto tem e o que o artista plástico tem que se podem conjugar. Acredito também que é interessante manterem-se as autonomias porque há maneiras de fazer próprias de cada um. Hoje em dia o trabalho do arquitecto e do artista plástico é muito um trabalho de autor. A

diluição da noção do espaço de arquitectura como uma arquitectura muito minimalista é uma coisa que é possível dentro de uma determinada maneira de fazer. O trabalho do arquitecto vem geralmente primeiro. É um trabalho com muita gente, muitas disciplinas e várias situações diferentes. O trabalho do artista plástico é um trabalho mais isolado e autónomo no atelier e não depende de determinadas circunstâncias (declive do terreno, do urbanismo, da relação com os outros espaços). A relação com o artista plástico surge geralmente a partir do arquitecto. Existem casas que têm um frontal com uma pequena peça nos edifícios em Lisboa por causa de uma lei de 1% em que, os edifícios a partir de um certo volume tinham que aplicar uma obra de arte. De um modo geral o artista tem uma intervenção delimitada e parte do arquitecto pedir para desenvolver intervenções específicas. Eu fiz um projecto com o arquitecto Chuva Gomes numa escola em Viseu em que nós discutimos o edifício e a sua inserção no local e a ideia inicial de arborização. Acabei por fazer elementos vegetalistas e alguns outros propostos por mim. Tal como aconteceu com outros arquitectos (Graça Dias) o que faço é apontar um conjunto de soluções e em reunião vamos afinando a melhor opção. Não sendo arquitecto, talvez só trabalhando num atelier de arquitectura é que poderia começar logo de início e a certa altura eu poder intervir e no caso de um edifício com uma certa volumetria poderia dar as minhas indicações. Em conclusão o trabalho normalmente é feito de início pelo arquitecto sem a intervenção do artista.

## **P 2**

No seu percurso profissional conta já com diversas colaborações com arquitectos. Como surgem em geral as oportunidades para executar essas colaborações? Por amizade com os arquitectos, pela sua já reconhecida notoriedade, por simples encomenda, convite ou por quaisquer outras formas?

Para haver colaboração é necessário haver orçamento. Por diversas vezes os arquitectos não têm orçamento para artes ou os orçamentos são usados para design e desenho de interiores entrando na versão da parte decorativa. No trabalho do hotel Tivoli no Algarve, desenvolvi um trabalho interessante que nunca tinha feito usando moldes e fazendo um processo de investigação de materiais. As colaborações podem surgir não só por amizade, mas também

quando há a possibilidade e orçamento e o arquitecto se interessar e gostar pelo trabalho do artista plástico. Quando colaboramos existe uma potencialidade de animar o projecto como no trabalho da escola em que o Arquitecto Silva Gomes achou que os desenhos que eu fazia seriam um enriquecimento visual. Embora noutros casos há arquitectos que são eles próprios que fazem todo o projecto. Na porta Sul em Fátima houve a possibilidade de se fazer um desenho de tal modo que fosse muito abstracto visto do chão e que à medida que as pessoas fossem subindo poderiam visualizar os desenhos a diferentes distâncias, lados e a diferentes níveis e que só se via a totalidade do projecto quando se estava em cima na torre. Este trabalho combinou com uma base em calçada portuguesa e desenvolvi em conjunto com o gabinete de arquitectura um processo para se produzirem desenhos diferentes a partir de moldes semelhantes. Na Caparica também adaptei e tive que distorcer um desenho de uma árvore para se adaptar a duas fachadas do mesmo edifício num trabalho de calçada portuguesa em calcário negro e vidro branco com o arquitecto Graça Dias.

### **P 3**

Nas colaborações que têm tido lugar, sente que lhe é dada liberdade total de criação ou não tanta quanto poderia desejar?

Tenho tido bastante liberdade, adaptando esta liberdade às situações. O arquitecto pode me dizer que gosta deste desenho, ou que o desenho devia estender mais de uma maneira, ou utilizar outra cor, como aconteceu por exemplo como no hotel Tivoli em Vilamoura em que foi discutida a cor da superfície do betão colorido com um teste de três cores. Deste modo foi decidido em grupo qual a melhor opção. Não me considero um artista conflituoso e adapto-me e trabalho em conjunto com os gabinetes de arquitectura.

### **P 4**

Nos vários projectos de colaborações, depois de serem concluídos refere como projectos em que dilui todas as fronteiras que separam os artistas dos arquitectos. Tal acontece apenas no resultado final ou também sente que

faz parte do processo de desenvolvimento, no qual as referidas linhas de separação tendem a atenuar-se?

Na escola de Viseu e no hotel Tivoli a integração é bastante grande. Na intervenção das Olaias houve alguma falta de comunicação o que dificultou um pouco o planeamento do meu trabalho visto ter sido mudada a situação inicial e mais tarde o enquadramento dos outros elementos naquele espaço. Para funcionar o trabalho do arquitecto tem de ser muito claro e passar ao artista para o artista responder de uma maneira conveniente. Fiz várias abordagens com desenhos uns mais e outros menos abstractos para o Teatro de Almada e deixei o arquitecto de seguida escolher qual era o que ele gostava mais. Eu fiquei surpreendido porque pensava que o arquitecto gostava de uma coisa mais geral e abstrata, mas ele preferiu as situações que eram mais realistas. Assim se vê que esse contacto é fundamental.

Na barragem do Picote fiz um projecto para a sala de turbinas em que eu tive de adaptar às condições arquitectónicas existentes (cores, paredes) arranjando com um gabinete de engenharia uma estrutura metálica para suportar os vidros. Neste caso a minha intervenção foi vista não como uma colaboração e sim como uma adição ao projecto prévio do arquitecto.

## **P 5**

Com base no seu trabalho, sente que a união da arte com a arquitectura (ou do artista com o arquitecto) é sempre obtida com sucesso? Ou será que - por vezes e por diferentes razões há projetos/colaborações que ficam “na gaveta”?

Nos Jerónimos adaptei os desenhos ao espaço do Claustro, a S. Jerónimo, e a cor escolhida estava em harmonia com os frescos do tecto, mantendo, no entanto, a minha autonomia. Encontrei uma solução em continuidade e relação com o edifício histórico.

## **P 6**

Sente que as colaborações com arquitectos contribuem para reflectir no seu próprio trabalho ao levarem-no a questionar-se sobre eventuais novas fronteiras, ideias, possibilidades ou relações?



Sim, há coisas que eu pego em arquitectura e uso em desenhos. Nos anos 90 fiz uma serie de desenhos designados jardins que são parte de mistura de imagens de interiores e exteriores de arquitectura modernista, inspiradas por exemplo de Le Corbusier, Gropius, não pela sua funcionalidade, mas pelo aspecto visual da representação que fizeram desses espaços. Fiz uma outra peça mais complicada chamada Piso 0 no Centro Galego de Arte Contemporânea em Santiago de Compostela em que escolhi o edifício do Siza Vieira e escolhi as linhas que se sobrepuseram mais do colapso de todas as plantas do edifício num único plano. Desenhei depois um puzzle ondulante fazendo um novo mapa do edifício que funciona por uma descontinuidade de cores e que mantém a relação íntima determinada pela forma original do edifício. Outros desenhos foram feitos a partir de plantas de arquitectura clássica em que os utilizo de modo muito plástico. Recolhi várias fotografias em viagem a Veneto da arquitectura de Palladio para usar potencialmente como referências em trabalho futuro, mesmo sendo as referências distantes do seu ponto de origem.

## **P 7**

Com a sua já vasta experiência nestes domínios, considera que eram mais frequentes as colaborações entre artistas e arquitectos nos dias de hoje ou no passado?

Tenho noção que isso sempre existiu. No Renascimento há artistas que são em simultâneo arquitectos e que acabam por definir a arquitectura e fazer a sua pintura como Michelangelo. Bernini era um arquitecto e escultor que desenvolveu a ideia de espaço total e preenchimento do espaço, como uma ideia de integração. E acho que aos longo dos tempos a mistura persistiu, Le Corbusier, o multifacetado Frank Gehry. Em alguns casos como em museus o arquitecto dificulta a intervenção dos artistas plásticos não concordando com os trabalhos a expor (Hans Hollein do MMK em Frankfurt) ou desenhando salas com formas ou dimensões difíceis de intervencionar (MAAT em Lisboa, Guggenheim em NY).

## P 8

Sente-se ligado a algum movimento artístico arquitectónico ou a casos particulares quer de artistas quer de arquitectos que sente constituírem exemplos de referência no desenvolvimento das suas propostas artísticas?

Desenvolvi um conjunto painéis com a proporção segundo a regra de Ouro e diferentes dimensões que seguem a série. Gosto de coisas muito diferentes. Servem-me como referência a arquitectura modernista e a arquitectura Art Deco embora estas arquitecturas não usem a profusão de cores que eu utilizo. Gosto de Scarpa, de Hans Hollein, da intervenção feita no café Aubette por Jean Arp e por Theo van Doesburg, ou mesmo do controverso Richard Meier que desenhou o Museu Frieder Burda em Baden Baden. No meu trabalho desenvolvo a ideia de um espaço completo usando desde a arquitectura do barroco até à arquitectura modernista para que o espectador possa estar rodeado por essa totalidade.

## **PEDRO PROENÇA**

*Entrevistado em outubro de 2017 com 9 perguntas, na casa do Pedro Proença em Lisboa.*

### **Pergunta 1**

No seu trabalho podemos ver e sentir as artes visuais, as quais entram em contacto com a realidade urbana (desenho para calçada na Expo) ou na arquitectura (vários murais com painéis de azulejos). O que significa para si a convergência/união entre artes e arquitectura?

Para já há uma disciplina de base que é o desenho, e o desenho engloba tudo. Desde que me conheço sinto que a arquitectura e as artes estão integradas, um bocado como a perspectiva do Le Corbusier. Acho que sobretudo a arte dá um suplemento afectivo à arquitectura, penso que basicamente é isso. Vê-se desde a mais remota antiguidade que é fundamental, faz mais companhia.

### **P 2**

No seu percurso profissional conta já com diversas colaborações com arquitectos. Como surgem em geral essas colaborações? Por amizade com os arquitectos, pela sua já reconhecida notoriedade, por simples encomenda, convite ou por quaisquer outras formas?

A iniciativa parte sempre do arquitecto que quer usar o meu trabalho, depois eu tento encontrar soluções exactamente com um arquitecto relativamente a um cliente. Um orçamento extra pode também permitir colaborações pontuais.

### **P 3**

Nas colaborações que têm tido lugar, sente que lhe é dada liberdade total de criação ou não tanta quanto poderia desejar?

Não me lembro de muitas limitações. O que existe normalmente são limitações temáticas e do espaço específico.

#### **P 4**

Vários projectos de colaborações, depois de serem concluídos estão referidos como projectos que diluem todas as fronteiras que separam os artistas dos arquitectos. Tal acontece só apenas no resultado final ou também sente que faz parte do processo de desenvolvimento, no qual as referidas linhas de separação tendem a atenuar-se?

Eu acho que há momentos que podia haver maior entrosamento em termos de encontrar soluções entre artistas e arquitectos. Pode haver sugestões de forma de abordar o espaço, fazer a espécie de um brainstorming. Eu acho que nesse aspecto poderia haver coisas mais divertidas e mais estimulantes como havia também artistas e arquitectos no Renascimento que encontraram soluções muito originais para as coisas. Os artistas têm uma atitude mais subserviente relativamente à arquitectura.

#### **P 5**

Com base no seu trabalho, sente que a união da arte com a arquitectura (ou do artista com o arquitecto) é sempre obtida com sucesso? Ou será que - por vezes e por diferentes razões há projetos/colaborações que ficam “na gaveta”?

Escrevi teoria de arquitectura durante um período há 20 anos atrás. Fiz também desenho ou fantasias arquitectónicas e gosto de pensar na arquitectura como alfabetos. Uma das coisas que faço é criar alfabetos para computador e categorizar elementos arquitectónicos, como janelas, flores, rodapés e depois criar montagens, como se a arquitectura fosse um espaço de montagem, nesse sentido pode dizer que gostaria de desenvolver com um arquitecto uma espécie de laboratório formal ou quase formal.

#### **P 6**

Sente que as colaborações com arquitectos contribuem para reflectir no seu próprio trabalho ao levarem-no a questionar-se sobre eventuais novas fronteiras, ideias, possibilidades ou relações?

Sim, acho que sim pode acontecer, normalmente não tem acontecido, mas gostaria imenso que acontecesse.

**P 7**

Com a sua já vasta experiência nestes domínios, considera que eram mais frequentes as colaborações entre artistas e arquitectos nos dias de hoje ou no passado?

Há períodos no passado em que as colaborações seriam mais frequentes como no Renascimento. Mas hoje alguns arquitectos têm apetência artística, e mostram por vezes uma vontade de fugir para a área do design, através do desenho, porque no fundo é uma espécie de pequena arquitectura. Acho que hoje em dia devia haver mais oportunidades para os artistas experimentarem o espaço tal como houve brevemente no período do modernismo. Gostaria imenso que houvesse um fluxo inovador na arquitectura nesse sentido.

**P 8**

Já trabalhou em ateliers de arquitectura como por exemplo da Garilho da Graça ou Fernando Sanchez Salvador. Sente que as colaborações com arquitectos contribuem para reflectir no seu próprio trabalho ao levarem-na a questionar-se sobre eventuais novas fronteiras, ideias, possibilidades ou relações?

Para mim é importante criar um fluxo teórico, de forma a que determinadas coisas possam emergir. E se possível haver uma partilha com outras pessoas, gosto muito de trabalhar com arquitectos. Um tem uma ideia, o outro desenvolve essa ideia num determinado sentido e a certa altura estamos a fazer coisas completamente diferentes, mas estamos a trabalhar em linhas que se cruzam e se diversificam. Aqui há uma coisa fundamental, que é o entusiasmo, porque trabalhar sozinho é muito mais triste.

**P 9**

Com a sua já vasta experiência nestes domínios, considera que eram mais frequentes as colaborações entre artistas e arquitectos nos dias de hoje ou no passado?

Gosto de imensa gente, tenho poucos des – gostos e algumas pessoas com quem embirro têm coisas que aprecio e algumas vezes invejo.

## FERNANDO SANCHEZ SALVADOR

*Entrevistado em outubro de 2017 com 7 perguntas, na Faculdade de Arquitectura Universidade de Lisboa.*

### Pergunta 1

Em alguns dos seus trabalhos usa a arte no projecto. O que significa para si a convergência/união entre a arte e a arquitectura?

Entre arte e arquitectura existe uma convergência natural e fundamental. Natural do ponto de vista da nossa formação, nós convivemos na nossa fase académica do curso com artistas. Na Faculdade das Belas Artes tinha artes plásticas e arquitectura juntos, e, portanto, naturalmente que essa formação estava fisicamente na nossa mão. O nosso interesse manifestou-se desde cedo com esses nossos “compagnons de route” e ficámos amigos nalguns casos e admiradores noutros. Houve sempre uma proximidade e uma curiosidade grande de ir acompanhando o trabalho destes artistas e esse interesse acaba por ir contaminando também de alguma forma a forma como olhamos para o mundo, e para a arquitectura que vamos desenvolvendo nas circunstâncias que vamos desenvolvendo.

A relação entre arte e arquitectura dá-se, não porque os arquitectos sejam artistas ou estejam nessa condição, ou que os artistas estejam na condição de arquitectos, são áreas diferentes, mas há uma convergência que é natural e que tem que haver com a percepção do mundo, com a cintilância que as coisas tem, e que é fundamental para uma componente mais criativa, mais artística das formas de manifestação que temos cada um no seu ofício.

### P 2

No seu percurso profissional conta já com diversas colaborações com artistas. Como surgem em geral estas oportunidades para executar essas colaborações? Por amizade com os artistas, pela reconhecida notoriedade deles, por simples encomenda, recomendações, ou por quaisquer outras formas?

Essa proximidade existe como eu disse nas formações, mas não tem sequer haver com grupos etários específicos, tem a haver com a natureza do trabalho dos artistas que nós vamos acompanhando, temos uma curiosidade naturalmente grande sobre o trabalho artístico tanto nacional como internacional, a visitar exposições, a visitar locais onde essa arte esta exposta ou foi produzida, e naturalmente que essa curiosidade e essa vontade de conhecer é útil e agradável. Eu penso que a arte de facto é o que nos aproxima quase de Deus, não no sentido religioso, mas no sentido quase do absoluto, porque a arte foca problemas que o quotidiano tem dificuldade em caracterizar para resolver. A arte desloca-se, solta-se e de facto as grandes questões passam por essa necessidade ancestral do ser humano desde a pré historia.de se expressar para além das coisas mais objectivas e mais necessárias do dia a dia.

Portanto nós convidamos os artistas que conhecemos quer pessoalmente, quer pelas obras de arte que produziram, e que achamos ter afinidades com o trabalho que estamos a desenvolver e executamos o projecto em conjunto. Em conjunto logo desde o inicio porque a arte não surge a meio do caminho, ou no fim do percurso para preencher áreas indefinidas ou indecisas. O artista é um componente fundamental na forma logo como se focam os problemas da arquitectura cada um na sua área, mas desse ponto de vista mais humano e mais universal e aí há uma convergência mais natural e necessária também.

### **P 3**

Com base no seu trabalho, sente que a união da arte com a arquitectura (ou do artista com o arquitecto) é sempre obtida com sucesso? Ou será que por vezes e por diferentes razões há projetos/colaborações que ficam “na gaveta”?

Às vezes há projectos guardados na gaveta porque não se vencem os concursos, ou que não se chegam a realizar por circunstâncias diferentes. No entanto esse trabalho é feito e tem obtido bons resultados e do nosso ponto de vista satisfaz-nos, dá-nos uma proximidade maior com os artistas e sobretudo com as obras das artistas.

Alguns trabalhos resultam em experiências que por qualquer razão não foram para a frente, mas ficam suspensas no tempo para espera de uma oportunidade

em que se podem vir a concretizar e acredito que um dia vamos fazer e vamos experimentar e ver que resultados é que vão dar.

#### **P 4**

As colaborações com artistas contribuem para reflectir diferente no seu próprio trabalho ao levarem-no a questionar-se sobre eventuais novas fronteiras, ideias, possibilidades ou relações?

Não temos a preocupação de trabalho ser artístico, temos a preocupação de facto, que o trabalho influencie comunidades e as pessoas que os vão usufruir. Nós trabalhamos com equipas muito vastas, com formações muitos diferentes (engenharias de estrutura e electrotecnia, designers, historiadores de arte), e cada ou cada área de formação terá muitas vezes linguagens próprias e a dificuldade está em descodificar essas linguagens. Estabelecemos plataformas comuns relacionadas naturalmente com afinidades pessoais e artísticas para podermos trabalhar em conjunto. A obra de arquitectura é sempre uma obra de conjunto de muitas áreas diferentes que intervêm com graus diferentes, mas que todos contribuem e é necessário um trabalho coerente e que se atinja aquilo que se pretende. Por regra temos conseguido fazer etapas, e mesmo não as completando deixam-nos vontade na próxima de ensaiar coisas diferentes ou continuação do que não houve tempo para fazer com equipas de várias áreas em que confiamos tecnicamente nas soluções e na ética que encontram.

#### **P 5**

Com a sua já vasta experiência nestes domínios, considera que eram mais frequentes as colaborações entre artistas e arquitectos nos dias de hoje ou no passado?

No passado eram diferentes da que são hoje em dia. Hoje a velocidade é muito maior em todos os aspectos, o tempo de reflexão é muito mais curto, são condições em que vivemos, não são as escolhas que fazemos, de maneira que essas afinidades têm que ser construídas muitas vezes entre projectos ou entre soluções de projectos, e não propriamente quando estamos a resolver porque aí não há tempo para nada. Essas questões têm que se ver antes, e apoiar em leituras, em visitas e em curiosidades. Nesse aspecto a arquitectura é muito



mais do que um ofício, e transforma-se sobretudo para quem gosta, numa forma de estar, numa forma de viver.

## **P 6**

Cada país tem uma arte tradicional, por exemplo aqui em Portugal podemos usar o azulejo, mas pode-se reinterpretar e usar na arquitectura. Acha que é uma forma de preservar a cultura de um país?

Depende da forma como é estabelecido. Há formas ancestrais de trabalho que desenvolvem técnicas específicas, que têm a haver com materiais, originalmente da região, materiais que estavam próximos, e desenvolvem estas técnicas apropriadas, e um conhecimento próprio empírico que tem passado de geração em geração. É possível voltar a dar condições à arte de raiz mais popular ou chamada arte tradicional que contrasta com a arte mais erudita ou de formação, para que esta não sufoque com este dia a dia, e possa sobreviver e manter estas tradições que vão passando sempre por aprendizagem direta, que é possível preservar. Muitas vezes de facto se utilizarem determinados tipos de materiais também chama atenção para esses materiais e para essas técnicas.

No caso do azulejo, está a ser muito reutilizado em Lisboa, e que está a tornar até muito uniforme e massificado, tem como ponto de partida também uma questão que é boa. O revestimento exterior dos edifícios feitos em azulejos têm muito menos manutenção, o que seria muito mais apropriado, por exemplo, para a gestão de condomínios do que a pintura, mas isso são aspectos mais anedóticos do uso do azulejo. O azulejo varia muito de época para época e há muitos estudos, e até existem outro tipo de azulejos noutros países O azulejo não é uma característica nossa. Todas estes instrumentos e técnicas tradicionais podem e devem ser preservados para se adequarem, fazendo upgrades e atualizações uteis para o presente. Nós vivemos o presente, vivemos o contemporâneo, tudo isto serve, se servir o contemporâneo.

## P 7

Tem algum movimento arquitectónico ou artístico ou casos particulares quer de artistas quer de arquitectos que sente constituírem exemplos de referência no desenvolvimento das suas propostas artísticas?

Tenho muitos movimentos, muitos arquitectos, muitas obras de arquitectura, e faço deliberadamente não para as seguir ou copiar, mas como uma espécie de luzinhas que nos guiam, que nos satisfazem o olhar muitas vezes sem ter problemas para resolver. Quando menos esperamos usamos isso, porque o conhecimento não é literal, não é direto, e muitas vezes atravessa o consciente inconsciente e acabamos por nos reportar aquilo que nós vimos e aquilo que conhecemos e a lição dessas obras é de facto muito importante. Vou a todas as épocas, muitas das obras que admiro nem sei quem são os autores pois são coisas perdidas no tempo. Há muitas correntes arquitectónicas com as quais me identifico mais, e que nos são úteis pelo menos para reflectir. Estou a pensar no Modernismo da Europa nos anos 20 a 30, que é muito optimista, muito positivo em relação à forma como se procurava melhorar a sociedade e o espaço habitado. Depois com as guerras foi interrompido e perderam-se muitos desses valores, mas não acredito que o modernismo morreu completamente. Tenho obras de arquitectos que admiro internacionalmente e nacionalmente como obras de Andrea Palladio, Giuseppe Terragni, Adalberto Libera, Siza Vieira, Ben Herzog e tantos que nos inspiram dia a dia.

*Your thesis is like your first  
love: it will be difficult to forget.*

Umberto Eco, 1977.